

COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR 2020

HEARINGS BEFORE A SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES ONE HUNDRED SIXTEENTH CONGRESS FIRST SESSION

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COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR 2020

TUESDAY, FEBRUARY 26, 2019.

OVERSIGHT HEARING: UNDERSTANDING THE CHANGING CLIMATE SYSTEM AND THE ROLE OF CLIMATE RESEARCH

WITNESSES

DR. MICHAEL H. FREILICH, DIRECTOR OF NASA'S EARTH SCIENCE DIVISION

DR. NEIL JACOBS, ASSISTANT SECRETARY OF COMMERCE FOR ENVIRONMENTAL OBSERVATION AND PREDICTION

Mr. SERRANO. The committee will come to order. Good morning and welcome to our first CJS hearing of the 116th Congress.

And I want to take just a moment to clarify something: CJS stands for Commerce, Justice, Science, it does not stand for Congressman José Serrano. [Laughter.]

I have no committee named after me.

First, I would like to recognize and congratulate my friend and colleague, Mr. Aderholt of Alabama, who will serve as ranking member. I look forward to working with you in Congress as we make important decisions on what investments to make and continue our vital role in conducting oversight, to ensure the executive branch is spending taxpayer dollars wisely and investing in our nation.

I also want to welcome back returning members of the subcommittee, including our vice chairman, Mr. Cartwright of Pennsylvania.

Mr. CARTWRIGHT. Thank you.

Mr. SERRANO. Ms. Meng, from my home state of New York, who will be joining us in a little while; Mrs. Roby of Alabama; and, Mr. Palazzo of Mississippi.

Members joining us for the first time are Mrs. Lawrence of Michigan; Mr. Crist of Florida; Mr. Case of Hawaii; Ms. Kaptur of Ohio, who in her spare time chairs the Energy and Water subcommittee; and last, but not least, Mr. Graves of Georgia, my colleague and ranking member of the Financial Services and General Government subcommittee.

Welcome, everyone. It is a privilege and honor to serve with you in this Congress, and I hope you find the work we do on this subcommittee as rewarding as I have. We will agree and disagree across many areas, but it remains incumbent upon all of us to get

a final product out of subcommittee, full committee, and through both chambers of Congress that will make us proud. I remain committed to meeting the challenges ahead and doing that together.

And I must say, on a personal note, that this has always been my favorite committee. I have served as ranking member here with Chairman Harold Rogers, and so this is quite a day for me. But I have as much desire as my colleagues on the Republican side have to make sure that we get a bill out and get a bill passed through both Houses.

And I want to welcome Dr. Neil Jacobs, who serves as Assistant Secretary of Commerce for Environmental Observation and Prediction, and, as of yesterday, NOAA's Acting Administrator—as of yesterday, right, and today? [Laughter.]

Not the acting. Congratulations.

In this new role, Dr. Jacobs will oversee NOAA's \$5.4 billion budget, which in addition to including NOAA's Sea, Air, Land, and Space Observing Platforms and the critical environmental data they provide, it will now also cover the wet side of NOAA, and all of its work in fisheries and coastal management.

Prior to joining NOAA, Dr. Jacobs served as Chief Atmospheric Scientist at Panasonic Avionics Corporation, was Chair of the American Meteorological Society's Forecast Improvement Group, and served on the World Meteorological Organization's Aircraft Base Observing System expert team.

Next I also want to welcome Dr. Michael Freilich, who has served as the Director of NASA's Earth Science Division in the Science Mission Directorate at NASA Headquarters since 2006. His creative retooling of the Earth Science Division's approach to research has been widely credited with protecting and enhancing the agency's vital work.

Prior to his tenure at NASA, he spent most of his career as professor and as Associate Dean at Oregon State University's College of Oceanic and Atmospheric Science, and member of the technological—technical staff at the Jet Propulsion Laboratory in California. This statement is really a test on how well you can handle the English language and, being that English is a second language too, I am still dealing with it.

Dr. Freilich, it is my understanding that you will soon be retiring from NASA. The agency has giant shoes to fill given the many years you have dedicated to this field. Thank you for your service to the American people. We wish you well on this new and exciting chapter of your life.

Both NOAA and NASA have critical missions. What they are observing both above and below us is affecting us in many ways. This hearing will help us learn from two leading experts about how climate is changing; how that will impact our country and economy in the short and long term; what research these agencies are conducting to help prepare us for the future; and how strategic investments from our subcommittee will help meet those challenges.

Over the weekend it was reported that the White House plans to name an ad hoc group of scientists with alleged ties to the fossil fuel industry to refute November's Interagency National Climate Assessment Report that I have here. This unaccountable working group appears set to deliberately cherry-pick data and science with

the sole purpose of pushing back against the widely accepted science around climate change. This only serves to diminish the magnitude of this crisis and it is dangerous. It also undermines the important climate research being conducted by the board of scientists at Federal agencies like NOAA and NASA.

As I have said many times, it is more than evident that our climate is changing, and doing so very rapidly. The people of Puerto Rico saw this firsthand as they experienced the largest national disaster in their history with Hurricane Maria.

From the droughts fueling wildfires out West in California to hurricanes devastating the continental Southeast year after year, our Earth is experiencing record temperatures that cause extreme weather, affect food supplies, and devastate local economies. The Federal Government must have the tools and resources it needs to study these changes, so we can prepare and respond accordingly. The CJS subcommittee leads the way in this effort.

Gentlemen, it is a privilege to have you join us for this important discussion, and to learn from your expertise on this subject from the perspective of the agencies you represent. And, as I told Mr. Culberson, who was the former chair of this committee, if we can't agree that there is climate change, can we at least phrase it in this way: something is going on and we have to look at it.

Before we begin, I would like to recognize my friend and colleague, and a person I am really looking forward to working with in trying to reach agreement as much as possible, so we can do the work we have to do, Mr. Aderholt for his opening remarks.

Mr. ADERHOLT. Thank you, Mr. Chairman, and thanks for yielding. Let me first say congratulations to you on your new chairmanship, it is well deserved and well earned.

As most of you in this room know, Mr. Serrano is a very hard-working and well-respected member of the Appropriations Committee, and I am honored to serve alongside him as ranking member. I am thankful for his friendship that we have maintained over the many years and look forward to working together with him, as well as working in this Subcommittee on Commerce, Justice, and Science. And it is my hope that, as we enter this new Congress, we will continue to reach across the aisle and tackle those tough issues that our constituents face each and every day.

Like the chairman, I would also like to take a moment to welcome our witnesses to this subcommittee this morning, Dr. Neil Jacobs and Dr. Michael Freilich. Thank you for joining us today and your service to NOAA and to NASA both.

And, as the chairman mentioned, Dr. Jacobs, congratulations on being named as Acting Administrator at NOAA, and we look forward to working with you in that capacity.

As we await the arrival of the fiscal year 2020 budget request, I want to thank Chairman Serrano for holding this oversight hearing. It is important that the committee hold these types of hearings to gain a better understanding of the priorities and the work of the agencies that are under our jurisdiction.

Today's hearing focuses on the topic of, that is important to all of us, climate change. It is not a new issue or an idea, and here in Congress we have debated the climate issue for many decades. Most of us agree that the climate is changing and we want to be

good stewards of the Earth, so that our children and our future generations can enjoy a healthy environment, but we often disagree about the major drivers of climate change, the best way to address it and how to prepare for the future.

As members of Congress, I believe that we should focus on fostering innovative ideas to address the changing climate. We should be exploring and investing in technologies that reduce pollutants and protect the long-term health of our planet, but do not impede energy development. After all, Congress should promote the all-of-the-above energy solutions policy.

To succeed, the United States needs a broad portfolio of affordable energy technologies to create cleaner energy. A priority should be placed on putting forth realistic, market-based solutions for the United States dominance of the clean energy market.

Climate solutions need not compromise the American economy or put unnecessary stress on the American family. Research being done at NOAA and NASA is making significant contributions in the advancement of earth science and its applications, and it plays a critical role in informing our policymaking efforts. Therefore, when it comes to climate research, it is imperative that we focus our resources on advancing our space and ground observation and measurements to improve data accuracy, sustainability, and validity. This will allow us to speculate less, gain a better understanding of the complex relationship between Earth's changing climate and weather patterns, and formulate more concrete, long-term climate models.

Mr. Chairman, I hope today we can have a thoughtful dialogue about the observations, models, and scientific analysis that NOAA and NASA carry out to better understand this ever-changing planet we call Earth. NOAA and NASA's technological and scientific abilities apply to us as policymakers to understand climate trends, impacts, and risks, so that we are equipped with the information to best prepare our nation in the future.

Mr. Chairman, thank you for letting me share my opening remarks and, again, to welcome our witnesses that are here before us this morning, and I look forward to the testimonies and the discussion that lie ahead, and I yield back.

Mr. SERRANO. Thank you, Mr. Aderholt. Thank you.

Dr. Jacobs, you are recognized, at this time for your opening comments.

Dr. JACOBS. Good morning, Mr. Chairman and members of the committee. Thank you for this opportunity to testify at this hearing.

NOAA plays an essential role in advancing scientific understanding of Earth's climate system through sustained observations, integrated modeling, and interdisciplinary research. Accurate observations of the current state of the environmental conditions are critical to building a robust and reliable time series of historical data that is required to enable a more complete understanding of the complex processes that regulate Earth's climate.

NOAA's observing system network extends throughout the oceans, measuring key metrics including temperature, currents, chemistry, and sea level. Terrestrial observations monitor precipi-

tation, soil moisture, land use, vegetation, snow cover, glaciers, and sea ice, as well as many derived data sets from proxy data.

NOAA samples the physical and chemical properties of the atmosphere through a wide range of systems, from *in situ* observations provided by weather balloons and aircraft, and surface instrumentation, to remotely sensed satellite data. High quality, uninterrupted, long-term measurements of greenhouse gases, aerosols, water vapor, ozone, and ozone-depleting gases are essential. Quantifying the sources and sinks of each of these climate-forcing agents and characterizing the roles they play in the climate system are vital to advancing the state of knowledge and climate science.

Throughout collaboration with our NASA colleagues, NOAA's Space Weather Prediction Center monitors total wavelength-integrated energy from sunlight, which is referred to as a total solar irradiance. To derive meaningful information on trends and interactions from these observations, they must be monitored for decades or longer.

NOAA's climatological predictive capabilities span the medium range and sub-seasonal to seasonal and beyond. Our suite of prognostic tools can be divided into statistical and dynamical models. The monthly to seasonal forecasts come from the Climate Forecast System, or CFS, which is based on the Global Forecast System, as well as the North American Multi-Model Ensemble, which is a suite of seven different models. This forecast projects out 9 months, but research is being done to extend the longer-range predictions out to 24 months.

Prediction of climate variations, ranging from El Niño and Madden-Julian Oscillation, to sudden stratospheric warming events altering the polar vortex, provide long-range probabilistic guidance on when future conditions will be favorable for extreme weather events that impact lives and property, from tornados and hurricanes, to cold air outbreaks, heat waves, and flooding.

The next generation CFS will be FV3-based atmospheric model that is two-way coupled to an ocean model with increasingly realistic representations of physical and chemical interactions. The new CFS will be a part of NOAA's transition to the unified forecast system, which spans large time scales and space scales with a common architecture.

Decadal forecasts, produced by NOAA's Geophysical Fluid Dynamics Laboratory, are used in long-range projections. The verification of these models is made using historical analyses and reforecasts. In order to extract a meaningful signal, a large ensemble of models and substantial high-performance computing resources are required.

In addition to the suite of dynamical models, NOAA runs several statistical models. These statistical models include canonical correlation analogs, regressions from post-process dynamical model output. These are valuable assets, not just as predictive tools, but also a means to refine and improve the dynamical models.

In an effort to improve transparency, NOAA makes all of its data, from raw observations to post-process model output, available to the public via archives preserved at NOAA's National Centers for Environmental Information. In addition to the data, the source code that is used to process the data is also made available. How-

ever, much of this existing code lacks sufficient documentation and support. This makes experiment replication and software change justification challenging for those outside the climate science field.

With limited resources, we believe it is best to focus investment on developing more accurate and reliable models. Substantial progress has been made over the last several decades in observations modeling and understanding, but the mission remains incomplete. Key scientific uncertainties limit scientists' ability to understand and forecast changes in the climate system. Factors responsible for climate- forcing and those underlying climate variability need to be better characterized and quantified to improve the nation's ability to predict the future state of the climate system, including the occurrence of extreme events, with more accuracy than today.

Mr. Chairman, Ranking Member Aderholt, and members of the subcommittee, thank you again for inviting me here to testify. I would be pleased to answer any questions you may have about NOAA's climate programs.

[The information follows:]

**WRITTEN TESTIMONY BY
DR. NEIL JACOBS
ASSISTANT SECRETARY OF COMMERCE
FOR ENVIRONMENTAL OBSERVATION AND PREDICTION
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE**

**HEARING ON
UNDERSTANDING THE CHANGING CLIMATE SYSTEM,
AND THE ROLE OF CLIMATE RESEARCH**

**BEFORE THE
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE,
AND RELATED AGENCIES
UNITED STATES HOUSE OF REPRESENTATIVES**

FEBRUARY 26, 2019

Introduction

Good morning Mr. Chairman and Members of the Committee. Thank you for the opportunity to testify at this hearing. I am Neil Jacobs, Assistant Secretary for Environmental Observation and Prediction at the National Oceanic and Atmospheric Administration (NOAA) in the Department of Commerce.

It is widely recognized that understanding weather has an overwhelming impact on not only the protection of lives and property, but also on the U.S. economy. Weather-related impacts to the U.S. economy are estimated to reach hundreds of billions of dollars annually. The recently issued Fourth National Climate Assessment also included estimates of potential economic impacts under future climate scenarios (including out to the year 2100). However, much less attention has been given to the importance of understanding sub-seasonal to seasonal forecasts, where current forecasting skill is low, yet the potential economic benefits of improvements to these forecasts are very high. This opportunity was recognized by Congress with the Weather Research and Forecasting Innovation Act's focus on increased forecasting skill of sub-seasonal to seasonal weather prediction.

In addition, the recent reauthorization of the National Integrated Drought Information Systems Reauthorization Act of 2018 created the Earth Prediction Innovation Center, or EPIC, which will improve the United States weather and climate models through focused attention and investment throughout the entire atmospheric modeling community, including short term weather, sub-seasonal and seasonal oscillations, and long term climate patterns. Implementation of EPIC is among the Department's and NOAA's highest priorities and will directly benefit taxpayers as well as the U.S. climate science enterprise. Improvements in weather and climate models will feed advancements in operational forecast products, impacting many sectors of the United States

economy, ranging from agriculture and fisheries management to energy markets and inland water management.

NOAA is a global leader in the full spectrum of scientific understanding of Earth's climate system through sustained observations and monitoring, integrated environmental modeling, historical data management, and interdisciplinary research. Because so many factors influence the Earth's climate, and these factors can be highly variable, accurate and long-term observations of the current state of the Earth's environmental conditions are critical. NOAA's observing system network extends throughout the global systems. NOAA records information from all of the world's oceans and major seas, measuring key metrics including temperature, currents, chemistry, and sea level. Terrestrial observations monitor precipitation, soil moisture, land use and vegetation, snow cover, glaciers, Arctic sea ice, as well as many derived values from proxy data.

NOAA samples the physical and chemical properties of the atmosphere through a wide range of systems from *in situ* observations provided by weather balloons, aircraft, and surface instrumentation to remotely sensed satellite and radar data. High-quality, uninterrupted, long-term measurements of greenhouse gases, aerosols, water vapor, ozone, and ozone-depleting gases are essential. Furthermore, quantifying the sources and sinks of each of these climate-forcing agents, and characterizing the roles they play in the climate system, are vital to advancing the state of knowledge in climate science. In addition, through collaboration with our National Aeronautics and Space Administration (NASA) colleagues, NOAA's Space Weather Prediction Center monitors the total wavelength-integrated energy from sunlight, which is referred to as the total solar irradiance. To derive meaningful information on trends and interactions from all of these observations, they must be monitored without interruption for many decades or longer.

NOAA has been operating polar-orbiting satellites that have been providing continuous global observations used in climate science since 1978. Data from these satellites has been invaluable for studying and monitoring phenomenon related to changes in sea surface temperature, changes in the cryosphere, desertification, composition of the atmosphere, cloud climatology, vegetation dynamics, and biomass burning. Some challenges in this activity include periodic reprocessing of the data to maintain consistency over different satellite series, combining NOAA data with data from partner agencies, and blending data from satellites, models, and other observations.

NOAA's predictive capabilities span the medium range and sub-seasonal to seasonal and beyond. NOAA's suite of prognostic tools can be divided into statistical and dynamical models. Dynamical tools used for the monthly to seasonal forecasts include the Climate Forecast System, or CFS, which is based on a low-resolution version of the Global Forecast System, and the North American Multi-Model Ensemble, which is based on a suite of forecasts from seven different global forecast models. The CFS model projects out nine months, but there is research underway to extend the longer-range predictions to 24 months.

Prediction of climate variations, ranging from El Niño and the Madden-Julian Oscillation to sudden stratospheric warming events altering the polar vortex, provide longer-range probabilistic guidance on when future conditions will be favorable for extreme weather events that impact

lives and property, from tornadoes and hurricanes to cold air outbreaks, heat waves, and flooding. The next-generation CFS will be a Finite-Volume Cubed Sphere (FV3)-based atmospheric model that is two-way coupled to an ocean model, which can handle everything from meltwater and thermal expansion, and with increasingly realistic representations of the physical and chemical interactions of the complex climate system. The new FV3-based CFS will be part of NOAA's transition to a unified forecast system (UFS), which spans large time and space scales with a common architecture used by the broader scientific community.

Decadal forecasts, produced by NOAA's Geophysical Fluid Dynamics Laboratory, are used in very long-range projections. The verification of these model simulations is made using historical analyses and reforecasts made over the past several decades, resulting in models that are among the best, if not the best, in the world. In order to extract a meaningful signal at longer time ranges, a large ensemble of models and substantial high-performance computing resources are required.

In addition to the suite of dynamical models, NOAA runs several statistical models. These statistical models include canonical correlation analogs and regressions from post-processed dynamical model output. These are valuable assets not just as predictive tools, but also as a means to refine and improve the dynamical climate models.

In an effort to improve transparency, NOAA makes all of its data, from raw observations to post-processed model output, available to the public via archives preserved at NOAA's National Centers for Environmental Information. In addition to the data, the source code used to process the data is also made available; however, much of this existing code lacks sufficient documentation and technology support for users outside of government systems. This makes experiment replication and software change justification challenging for those outside the federal climate science field. While NOAA's primary near-term objective will be to develop more accurate and reliable models, I also hope to address the factors limiting transparency in the near future through initiatives such as EPIC, which will enhance community modelling support and give the public more confidence in the code and scientific methods we employ.

Substantial progress has been made over the last several decades in Earth system science observations, modeling, and understanding by NOAA scientists working with experts in other agencies and the private sector. However, the mission remains incomplete and many questions still remain unanswered. Key scientific uncertainties limit scientists' ability to understand and forecast seasonal to decadal changes in the climate system. The factors responsible for climate forcing, and those underlying climate variability, need to be better characterized and quantified to improve the Nation's ability to predict the future state of the climate system, including the occurrence of extreme events, with more accuracy than today.

Mr. Chairman, Ranking Member Aderholt, and Members of the Subcommittee, thank you again for inviting me to participate today. I would be pleased to answer any questions you may have about NOAA's climate programs.

Mr. SERRANO. Thank you, Dr. Jacobs.

Dr. Freilich, you are recognized now.

Dr. FREILICH. Chairman Serrano, Ranking Member Aderholt, Members, thank you for the opportunity to discuss NASA's roles and contributions to understanding our planet, including climate research.

The changing climate has profound impacts and opportunities for us and for our adversaries. Global average sea level is rising, impacting our nation's coastal infrastructure and the more than 100 million people worldwide who today live within a meter of sea level. Our satellite measurements show us not only how much, but why sea level is changing.

Average surface temperatures are rising. Since 2000, we have seen 18 of the 19 warmest years ever measured. Rising temperatures impact agriculture, transportation, disease vectors, and ecosystems everywhere.

Arctic sea ice is decreasing and thinning, and the Greenland and Antarctic ice sheets are evolving. NOAA and NASA measurements suggest that extreme weather events are becoming more frequent and intense.

Now, NASA measures and monitors these changes from space, then we use the measurements and our research programs to understand the natural processes that define our environment.

The changing climate also presents us with profound responsibilities. Only humans can alter our present actions based on what we think the world will be like generations in the future, but NASA does not make policy decisions; rather, we take the measurements and conduct the research. NASA makes the facts and the understanding available to you, decision-makers, to help inform your decisions, and to monitor whether policies that you decide upon are having their intended effect.

Now, the fact that we know with certainty that the climate is changing is actually a profound testament to our nation's technological and scientific abilities. NASA's and NOAA's satellites monitor most of the Earth's natural processes. Climate scale trends have all been detected from space.

Our applied sciences activities transform the measurements and the understanding into information products that improve lives.

Now, NASA has 22 Earth-observing research satellite missions on orbit, and 14 more are in development for launch before fiscal year 2023. Just this past year, in 2018, we launched five major Earth missions and instruments, and our next launch will be the Orbiting Carbon Observatory-3 to the International Space Station in late April.

Most of our missions involve international and interagency collaboration. We collaborate with the U.S. Geological Survey on Landsat, and we develop instruments and satellites jointly with NOAA. We also work with NOAA, the Navy, and the Air Force to transition research products into operational environmental predictions.

Our Earth Science budget supports high-end computing for all of NASA, programs for early career scientists, and, importantly, the development of Earth system models, including global climate models.

In the applied sciences, the NASA and U.S. Agency for International Development program called SERVIR, improves environmental understanding and decision-making capacity in developing nations. We help our nation and our international partners respond to natural disasters. In fiscal year 2018, our Disasters Applications program supported U.S. and international response to earthquakes and tsunamis, the California wildfires, floods and landslides around the world, volcanic eruptions, and hurricanes and typhoons.

We innovate. NASA invests in technology developments and we are demonstrating many of those new technologies, on CubeSats, little satellite missions. We put Earth-observing instruments on the International Space Station, and we are flying satellite constellations to demonstrate the observing systems of the future.

We are building instruments, NASA research instruments to fly as hosted payloads on commercial satellites in geostationary and low-Earth orbit, partnering with the private sector to fly on their satellites. And we have contracts with three private New Space companies to purchase their Earth-observing data from small satellite constellations.

After evaluations, we plan to pursue long-term data-buy contracts, benefitting both the government and the private sector. And NASA-funded research results and NASA personnel were foundational contributors to the Fourth National Climate Assessment.

So, while the largest uncertainties in predicting the long-term future climate result from our lack of knowledge of future human decisions, the satellite observations help us to advance Earth system science, and enable better resource management and decision-making.

Only from space can we measure all of the important quantities that link all of the space and time scales, and understand our complex planet in order to help improve lives.

Thank you again for this opportunity to discuss NASA's activities to observe and understand the Earth, and I too would be pleased to respond to questions.

[The information follows:]

HOLD FOR RELEASE
UNTIL PRESENTED
BY WITNESS
February 26, 2019

**Statement of
Dr. Michael H. Freilich
Director, Earth Science Division
Science Mission Directorate
National Aeronautics and Space Administration**

before the

**Subcommittee on Commerce, Justice, Science and Related Agencies
Committee on Appropriations
U.S. House of Representatives**

Chairman Serrano, Ranking Member Aderholt, Members of the Subcommittee, thank you for the opportunity to discuss NASA's contributions to understanding our planet and NASA's roles in advancing Earth system science and applications, including climate research. In this statement, I will also highlight some of the contributions made by NASA measurements, models, analyses, and NASA-funded investigators to the November 2018 Fourth National Climate Assessment, Volume II, which focused on climate impacts, risks, and adaptation in the United States.

The changing climate is having profound impacts and presenting profound opportunities – to us and to our adversaries. Global average sea level is rising, impacting our nation's extensive civil and national security coastal infrastructure, and the more than 100 million people worldwide who live within 1 meter of present-day sea level. Global average temperatures are rising, with the five warmest years on record having been the last five years, and 18 of the 19 warmest years ever measured having occurred since 2000. Changing temperatures are impacting agriculture, transportation, plants and human disease vectors. Rising ocean temperatures are contributing to widespread bleaching and death of corals in many regions and shifts in the distributions of economically important fish populations. The oceans are becoming more acidic, causing significant changes in ocean ecosystems. Diminishing sea ice cover is causing the Earth to absorb more heat from the Sun, perhaps leading to a positive-feedback cycle. Extreme weather events are becoming more frequent and more intense.

Not all of the changes are near-term negative. Growing seasons are increasing in present-day cool and cold areas, and previously frozen rivers and plains are becoming more habitable. But these changes may disproportionately benefit nations other than the United States. With generally warming temperatures, sea ice is diminishing, allowing more efficient Arctic

shipping routes and access to ocean floor resources for nations like Canada and Russia that have long Arctic coastlines and exclusive economic zones in the Arctic Ocean.

NASA measures and monitors these changes in our planet from space, and NASA uses the measurements to better understand the Earth's systems and the interactions between natural processes that define our environment.

The changing climate presents humans with profound responsibilities. We are the only species capable of altering present actions and making decisions based on our estimates of what our world will be like generations into the future. The Montreal Protocol – agreed to, and generally followed by virtually all nations – has been successful in reducing the concentrations of ozone-destroying chemicals like Freon in our stratosphere and setting the globe on a path likely to reduce the sizes and impacts of polar “ozone holes” and, by 2070, to return ozone levels and protection against harmful ultraviolet radiation to the high levels of the 1950s.

In part owing to significant advances by NASA and others over the past decades in understanding the Earth system, the greatest remaining quantitative questions about the future evolution of Earth's environment and climate stem from uncertainties regarding future economic, social, and policy decisions that humans will make.

NASA does not make policy recommendations. Rather, NASA research leads to greater understanding of our planet's natural processes, and the interactions of those processes, informing and improving Earth system models. NASA measurements provide information for policymakers, including information regarding the efficacy of environmental policies and decisions. (For instance, NASA measurements of stratospheric ozone levels provide the information that policymakers need to determine whether the Montreal Protocol is working as intended.)

Finally, the fact that we ***know with certainty*** that the climate is changing is a profound testament to our nation's – and to NASA's – technological and scientific abilities. NASA's comprehensive, global, sustained set of Earth observations and cutting-edge analyses allow us to monitor processes on and between the land, ocean, and the atmosphere. Thanks to NASA's satellite measurements and scientific analyses, we are increasingly able to detect climate trends and separate them from the much larger, shorter-scale, environmental variability we call “weather.”

NASA research satellites and research activities are key for observing and understanding our complex Earth as an integrated system, making global measurements of many vitally important environmental indicators from the vantage point of space. Each of the examples of climate-scale trends – from changing sea levels and temperatures to changing atmospheric composition and global radiation balances – has been detected and quantitatively characterized by spaceborne observations.

NASA uses the spaceborne measurements from U.S. and international partner missions, along with airborne and ground-based measurements and cutting-edge scientific analyses, to

provide key insights and new understanding of the complex processes – and the many interactions between processes – that define the Earth and its environment. The quantitative knowledge we gain is infused into numerical models, which can then be used to predict future conditions and anticipate the effects of different scenarios and approaches.

Through our Applied Sciences program, NASA further combines measurements and understanding of the Earth derived from research to provide information required by stakeholders and other federal agencies and to develop and test focused information products that allow stakeholders and decisionmakers of all types to factor environmental information into their strategies and plans.

NASA's Capabilities for Observing and Understanding the Earth and its Changing Climate

NASA's Earth science and applications program is guided by the priorities of the 2007 and 2018 decadal surveys produced by the National Academies. NASA combines cutting-edge technologies with the unique vantage point of space, and advances integrative research, data analyses, and close connections with a broad range of government and private-sector user communities, to:

- (1) Advance our knowledge of the myriad physical, biological, and chemical processes in and between the land, ocean, and atmosphere *and their interactions* that define our complex planet and its environment; and,
- (2) Develop, test, and transition focused information products – based on spaceborne measurements and research-based understanding – to deliver societal benefit and inform and improve environmental decision-making by a broad range of stakeholders.

NASA does not make environmental policy nor does NASA have any regulatory authority in the area of Earth observation. NASA's role is to provide unique, comprehensive observations of our environment, to conduct research leading to greater understanding of the Earth, and to make the observations and the understanding available to governmental policymakers and decision-makers of all sorts.

To accomplish these goals, ESD pursues activities in four broad elements:

Flight Element: NASA's Earth science flight element develops, launches, and operates a fleet of Earth-observing satellites and instruments, acquiring measurements of many different environmental quantities from the vantage point of space. Only from orbiting satellites can we make measurements that have high spatial resolution and global coverage with uniform accuracy; that can regularly sample measurements at all locations for long periods of time; and that include enough observations of the wide range of ocean, atmosphere, and land variables to understand the connections between Earth system processes as well as the workings of the individual processes themselves. Only the vantage point of space allows measurements of the complex Earth system that can illuminate connections between short- and long-time scales, fine- and global-spatial scales, and chemical, physical, and biological processes.

NASA's Earth science orbiting fleet presently includes 22 Earth-observing satellite missions and major instruments, with another 14 missions and major instruments in development for launch between April 2019 and the end of FY 2022. During FY 2018, NASA launched five major Earth missions and instruments:

- Total and Spectral Solar Irradiance Sensor-1 (TSIS-1);
- Gravity Recovery and Climate Experiment Follow-on (GRACE-FO);
- Ecosystem Spaceborne Thermal Radiometer Experiment on Space Station (ECOSTRESS);
- Ice, Cloud and land Elevation Satellite-2 (ICESat-2); and,
- Global Ecosystem Dynamics Investigation (GEDI).

The next major Earth observing instrument will be the Orbiting Carbon Observatory-3 (OCO-3), scheduled for launch to the International Space Station (ISS) in late April 2019. The next Landsat mission, Landsat-9, is on schedule for launch in December 2020.

Most of the on-orbit and in-development NASA Earth-observing orbital missions involve significant international and interagency collaboration. The principal interagency collaborations for Sustainable Land Imaging involve the U.S. Geological Survey (USGS), and a NASA develops a range of instruments and satellites jointly with the National Oceanic and Atmospheric Administration (NOAA). The NASA-USGS Landsat satellites have been acquiring baseball field-sized (30-meter resolution) spaceborne measurements of the planet's land areas for more than 46 years, and the Landsat data are the longest continuous, consistently processed, global set of spaceborne measurements of land cover and land use change ever acquired.

NASA's Earth science flight element also develops and operates the data systems required for operating and generating standard products from the orbiting research missions, and for enabling cutting-edge, integrative research using the spaceborne observations. The 2018 Earth Science and Applications from Space Decadal Survey specifically examined and endorsed NASA's Earth science "Program of Record" missions presently in development for launch prior to 2023. NASA's flight element plan for new mission development in 2023 and beyond is explicitly consistent with the major decadal survey recommendations for new missions and instruments.

Research and Analysis (R&A) Element: Our R&A activities are focused on advancing comprehensive scientific understanding of our planet's processes and their interactions. By supporting data acquisition from all available sources (including domestic, private-sector, and international partner satellites; data from airborne, ship-based, and ground network instrumentation; and outputs from operational weather models), the R&A element enables scientists to investigate and solve large scientific questions that cannot be addressed using data from only a single mission or instrument. The R&A element redeems the nation's investments in the NASA satellite missions by using their measurements widely to address many scientific investigations and improve our understanding of the Earth and its systems.

The R&A activities are organized into six thematic focus areas:

- Climate Variability and Change;

- Water and Energy Cycle;
- Carbon Cycle and Ecosystems;
- Weather and Meteorological Processes;
- Atmospheric Composition; and,
- Earth Surface and Interior.

Each focus area is interdisciplinary. Each partially overlaps others, thus ensuring all aspects of the complex Earth system are covered. NASA's existing and future planned satellite fleet makes measurements of many of the ocean, atmosphere, land, and ice quantities required to advance Earth system science in each of the thematic focus areas.

The R&A element also supports development and sustained data acquisition from ground-based instrument networks, as well as plans and conducts land and ocean field campaigns involving ground-, aircraft-, and ship-based platforms, often with interagency and international partners. Data from the networks and field campaigns are used both to address scientific questions and to help calibrate and validate satellite products. Sustained, multi-year field and airborne efforts such as the IceBridge campaign to measure ice surface height and ice sheet changes in both Greenland and Antarctica have been used to make key observations between the launches of major satellite missions, and to acquire climate-relevant data that could not have been obtained from satellite instruments.

R&A investments also support: high-end computing for all of NASA; development and improvement of Earth system models on all scales, including global climate models; focused programs for early-career scientists; and rapid response activities to capitalize on scientific opportunities resulting from episodic and intermittent geophysical events and hazards such as volcanic eruptions and earthquakes.

Along with the Applied Sciences and Technology development activities described in the following sections, our R&A element identifies and funds the best, most innovative research. We issue competitive, broad solicitations for proposals – open to researchers in academia and the private sector, as well as state, local, and tribal governments and all federal agencies, including NASA. NASA's Earth Science Division manages approximately 1,700 competitively selected grants and contracts for science, applications, or technology.

Applied Sciences Element: NASA's Applied Sciences element connects measurements and understanding from the Flight and R&A elements with the need for environmental information by a broad range of generally non-technical decision-makers. Applied Sciences activities develop and test innovative uses of Earth observations and scientific knowledge to inform private- and public-sector planning and decisions. Our Applied Sciences activities focus on key societal development goals in water resources, disasters, health and air quality, and ecological forecasting. The element works closely with flight projects and potential users to promote early and substantive involvement of user communities in mission and data product design, ensuring that users are ready to leverage mission data soon after launch.

Collaborating with the U.S. Agency for International Development (USAID), NASA's Applied Sciences element conceived and originated the SERVIR program - a multi-national,

multi-regional, multi-agency, interdisciplinary effort to improve environmental understanding and decision-making, raise capacity levels in developing nations, and help rapidly address and assess damage from natural disasters that occur in the third world. Through SERVIR, NASA and USAID cooperatively provide funding support, strategic planning, and overall coordination for a network of hubs and activities to help developing countries manage resources, reduce risks, and improve security, extending American leadership around the world. NASA's Marshall Space Flight Center is the home of the SERVIR Coordination Office (SCO), which coordinates the development of new NASA scientific tools and their integration with existing analysis systems at the hubs, and provides global support to, and coordination of, SERVIR projects. In support of the global SERVIR effort, NASA has partnered with 19 U.S.-based research institutes across 14 states, and the SERVIR team has developed custom analysis tools in collaboration with a host of diverse institutions and trained a wide range of regional support staffers. SERVIR is just one example of the Applied Sciences element's national and global efforts to use environmental information to improve decision-making and the quality of life on our planet.

Through its Disasters Applications program, the Applied Sciences element promotes the use of Earth observations to improve prediction of, preparation for, response to, and recovery from natural disasters. Disaster applications and related research on natural hazards support emergency preparedness leaders in developing mitigation approaches, such as early warning systems, and providing information and maps to disaster response and recovery teams. In FY 2018 alone, the NASA Disasters Applications program arranged for and provided focused satellite data, flights of instrumented aircraft, damage analyses and risk assessments, and other environmental information to U.S. and international response agencies for:

- Earthquakes and tsunamis in Alaska, Indonesia, Japan, and Mexico;
- Wildfires throughout California;
- Floods and associated mudslides in Hawaii, California, and the Midwest, as well as in India and Laos;
- Eight major hurricanes and typhoons, including hurricanes Michael, Willa, Florence, and Lane; and,
- Volcanic eruptions in Hawaii, Ecuador/Galapagos, Guatemala, Indonesia, Papua New Guinea, and Vanuatu.

Earth Science Technology Office (ESTO) Element: NASA's ESTO element conducts Earth-focused technology development activities, including development and flight of technology demonstration CubeSats and development of advanced measurement approaches for the nation's future land imaging Landsat satellites.

ESTO identifies, matures, and tests a broad range of technologies, from components to instruments and including ground and on-orbit processing technologies, so that they can be used with low risk in the design of future ESD missions. This proactive approach to technology maturation avoids the costs and risks introduced when significant technology development is required to complete flight mission development. ESTO technology maturation investments are informed by and span the full range of new missions and measurements recommended by the Earth Science and Applications from Space decadal surveys.

ESTO-supported technology activities are fully competed, and are managed through four basic programs:

- The **Advanced Component Technologies** (ACT) program advances component- and subsystem-level technologies to reduce the risk, cost, size, mass, and development time of future missions and infrastructure. ACT brings instrument, platform, and information system components to a maturity level that allows their integration into other NASA-funded technology projects, such as those funded by the Instrument Incubator Program.
- The **Instrument Incubator Program** (IIP) fosters the development and assessment of innovative remote-sensing instrument concepts by assembling components into complete subsystems or even full prototype instruments for ground, aircraft, or engineering model demonstrations and characterizations.
- The **Advanced Information Systems Technology** (AIST) program supports innovative advances in on-orbit and ground processing technologies to generate, manage, and exploit data in the five- to 20-year horizon. The **In-Space Validation of Earth Science Technologies** (InVEST) program demonstrates and validates Earth science technologies through instrument flights on standardized CubeSat platforms launched as secondary payloads. InVEST allows rapid and cost-efficient risk reduction for selected new instruments and subsystems that could be incorporated into near-future Earth observing orbital missions and instruments. To date, seven InVEST technology demonstration missions have been launched, and four remain in operation. Following successful achievement of their technology goals, NASA continues to operate the InVEST satellites to make use of their valuable Earth observations.

Orbital Observing System Collaborations and Innovations

By hosting instruments on the ISS and on commercial satellites in geostationary and low-Earth orbit, flying satellites in close formation, and operating constellations of CubeSats and other SmallSats, NASA and our international partners are expanding the impact of our satellites and orbiting instruments beyond the simple sum of the measurements from individual spacecraft.

For more than a decade, the “A-Train,” composed of six, different, relatively large, multi-instrument satellites, has been orbiting in formation, making near-simultaneous measurements of many different Earth system variables. All of the satellites pass over the same ground location in just over 10 minutes, some as close as 18 seconds apart.

An international collection of 10 satellites makes up the semi-heterogeneous Global Precipitation Measurement (GPM) constellation. Each GPM spacecraft carries at least one instrument that makes measurements over the globe related to rainfall and snowfall. Although the spacecraft are not flying close to each other, the orbits are coordinated and the measurements are cross-calibrated by periodic comparisons with the NASA-Japanese Space Agency’s GPM Core Observatory. By combining observations from all of the satellites, we can for the first time in human history measure precipitation over the entire globe at a spatial resolution of 6-10 miles and a temporal resolution of a few hours.

In collaboration with NASA's Human Exploration and Operations Mission Directorate, ESD is flying Earth-observing instruments on the ISS, launching in the unpressurized compartments of ISS Commercial Resupply spacecraft and operating on external mounting points on the station. There are presently five ESD instruments operating on the ISS -- SAGE-III, LIS, GEDI, ECOSTRESS, and TSIS-1 -- with several more scheduled to launch by 2021, including OCO-3.

NASA is also flying homogeneous constellations of identical small satellites to make frequent measurements of important atmospheric quantities and air-sea interactions for storm and extreme weather event investigations and predictions. The CYGNSS constellation of eight SmallSats, launched in December 2016, makes frequent measurements of winds in the eyewalls of rapidly evolving hurricanes and typhoons, using GPS signals reflected from the sea surface. Future CubeSat constellations to make other atmospheric and radiation balance measurements are being developed for flight early in the 2020s.

Finally, we are building science instruments that will fly as hosted payloads on commercial satellites in geostationary and low-Earth orbits. The TEMPO and GeoCarb instruments will fly on commercial geostationary satellites and will measure air quality (TEMPO), and atmospheric carbon dioxide, carbon monoxide, methane, and solar-induced fluorescence (GeoCarb) over the Americas. The MAIA instrument, which will be hosted on a low-Earth orbiting commercial spacecraft, will measure aerosols. NASA's ESD is thus leveraging public-private collaborations and the use of geostationary satellites to observe the Earth just as NOAA has for many decades flown geostationary meteorological spacecraft for weather forecasting.

NASA's Dynamic Earth Science Partnerships

NASA's Earth Science Division engages in substantive partnerships and collaborations with other federal agencies, international agencies and coordination bodies, and private sector and commercial entities.

As noted above, NASA has decades-long Earth-observing space mission partnerships with NOAA and USGS. Data from NASA research satellites are provided in near-real-time to operational agencies (NOAA and DoD) to improve the accuracy of their environmental predictions. NASA and NOAA jointly developed the on-orbit Suomi-NPP satellite, which was launched in 2011 and served for a time as NOAA's primary polar orbiting meteorological satellite. NASA and USGS co-develop the Landsat satellite series, with NASA funding the design, implementation, and launch of the observatories, and USGS funding the on-orbit operations, ground processing, and data distribution systems. The Landsat collaboration continues with Landsat-9, on track for a launch at the end of 2020. NASA and USGS are co-leading architecture studies to define the design and approaches for the nation's spaceborne land imaging systems following Landsat-9. NASA is collaborating with NOAA on a similar major study on NOAA's future satellite architectures. These studies are considering the use of private sector satellites, international partners, and satellite disaggregation among other solutions.

More than half of the on-orbit NASA Earth research satellites, and a substantial fraction of the missions in development for launch over the next four years, involve significant hardware collaborations with international partners. Examples include the recently launched GRACE-FO with Germany, the upcoming NISAR synthetic aperture radar mission with India, and the Sentinel-6A/B ocean altimetry missions with the European Space Agency, NOAA, the European Commission, and the European meteorological consortium EUMETSAT. NASA ESD and the European Space Agency coordinate activities related to research and field campaigns, interoperable data systems, and joint satellite mission activities through the formal international Joint Program Planning Group. NASA also has satellite mission collaborations with the Japanese space agency JAXA, the French and German space agencies CNES and DLR, and the Canadian Space Agency among others.

In addition to hardware collaborations focused on specific space missions, NASA's ESD also plays leading roles in national and international coordination groups, such as the Congressionally mandated, 13-agency U.S. Global Change Research Program, the Office of the Federal Coordinator for Meteorology, both the domestic USGEO and international Group on Earth Observations (GEO), and the international Committee on Earth Observing Satellites (CEOS), which is the satellite coordination arm of GEO.

To advance Earth system science research goals, NASA relies on the DOE, USDA, and NOAA for critical in situ and airborne observations of greenhouse gases and carbon storage in soils and plants – and, of course, those agencies rely on NASA for high-quality *global* remote sensing products that extend the reach and resolution of existing sparse networks. Through sustained collaborations, we have improved understanding of the atmosphere and carbon cycle that can now inform decision-making and carbon management approaches.

In the area of interagency space data utilization, ESD plays a major role in the NOAA-NASA-U.S. Navy-U.S. Air Force Joint Center for Satellite Data Assimilation, which leverages multi-agency contributions to enhance the use of remotely sensed data in NOAA's and DOD's operational global and local numerical weather prediction systems. Similarly, the Short-term Prediction Research and Transition (SPoRT) project at Marshall Space Flight Center is a NASA- and NOAA- jointly funded activity to transition experimental and newly operational satellite observations and research capabilities to the local and regional operational weather forecast community. End users include NWS Weather Forecast Offices (WFOs), NWS/National Centers for Environmental Prediction (NCEP) National Centers, other government agencies, and private sector entities.

Beginning in FY 2017, in collaboration with USGEO, NASA helped develop the Satellite Needs Working Group (SNWG). The SNWG is an Executive Branch process to identify and evaluate the environmental information needs of all civil agencies. In SNWG, NASA identifies other-agency needs that can be substantially addressed by existing satellites and data products, as well as needs that will be addressed by planned upcoming missions. One example outcome of the SNWG process is the decision by NASA to modify the data acquisition plan for the upcoming NISAR mission to enable more frequent, moderate-resolution soil moisture measurements over the entire continental United States to support a range of agencies, including NOAA and USDA.

ESD is also engaging in new, innovative public-private partnership approaches with the private-sector, including both non-profit and for-profit organizations.

In a new partnership program begun by ESD in FY 2017, NASA has contracted with three commercial space firms to purchase Earth observing data acquired by commercial constellations of small satellites. In this pilot program, NASA does not set detailed data quality requirements. As part of the pilot activity, NASA researchers are evaluating and characterizing the commercial data products to determine their value for advancing ESD's research and applications activities. Upon positive completion of the pilot evaluation and discussions regarding costs, latency, and data rights, NASA may pursue long-term data buy contracts, thus benefitting both the government and the private sector space organizations.

NASA's Key Contributions to the National Climate Assessment

NASA is a key participant in the 13-agency, synergistic U.S. Global Change Research Program (USGCRP). Consistent with the requirements of the Global Change Research Act of 1990, the Fourth National Climate Assessment report (NCA4) was prepared and delivered in two volumes. The first, the Climate Science Special Report published in 2017, detailed how climate change is affecting the physical Earth system and documented the status and current knowledge of physical climate science. In November 2018, the second volume was released, documenting human welfare, societal, and environmental elements of climate change and variability for 10 regions of the United States and for 18 key national topics. This NCA4 Volume II focuses on observed and projected impacts, risks, and risk reduction approaches, and implications of climate change impacts under a variety of mitigation approaches.

As the nation's civil space agency and with substantial Earth science and applications research programs, NASA-funded research results and NASA personnel are foundational contributors to NCA4. NASA's observations, advanced Earth system models, and scientific analyses underpinned virtually all of the scientific findings in Volume I.

NASA also made substantial contributions to the NCA Volume II. Senior NASA ESD personnel served on the Subcommittee for Global Change Research and the NCA4 Steering Committee, both of which provided senior-level oversight of the preparation and review processes of the second volume. NASA detailed a scientist to serve in the NCA Coordination Office throughout the preparation of both volumes of NCA4, and a NASA researcher authored Chapter 11 ("Built Environment, Urban Systems, and Cities") of Volume II.

NASA analyses and research results are cited in NCA4 Volume II in many places. Imagery – including smoke-penetrating, high-resolution thermal infrared measurements – from NASA polar-orbiting research satellites has been instrumental in identifying and tracking the trends in the increasing number of western wildfires in recent years, and in understanding and predicting wildfire vulnerability.

NCA Volume II also used NASA-developed Earth system and climate models along with and sophisticated NASA multi-model analyses to quantitatively determine global temperature trends and their uncertainties over the past decade and to estimate contributions to the observed temperature evolution from different processes and sources, including from greenhouse gases.

Accurate and extensive rainfall, sea-surface temperature, and upper-ocean heat content measurements acquired from NASA's Global Precipitation Measurement Core Observatory satellite, the NOAA-NASA Suomi-NPP mission, altimetry satellites, and from NOAA's NASA-built operational geostationary GOES satellites, along with NASA-supported data analyses and research, informed the NCA4 summaries of observed recent changes in precipitation patterns from extreme storm events and their possible relationships to climate variations. High-resolution measurements of ground water and aquifer storage changes from the NASA GRACE (Gravity Recovery and Climate Experiment) mission informed the NCA4 Volume II analyses of groundwater impacts of the changing climate.

Going Forward

While uncertainties in predicting long-term future climate include our lack of knowledge of future human decisions, scientific questions remain regarding details of the feedback mechanisms between biogeochemical cycles and the physical environment, as well as more classical issues such as the physical modeling of cloud and water vapor feedback.

Sustained, accurate, space-based observations are providing critical information that is advancing Earth system science and enabling better resource management and decision-making. Only from space can we make measurements of most of the important quantities and link all of the important space and time scales. Ground and airborne observations, research activities, and technology advancement are increasing our understanding of our planet. NASA, NOAA, USGS, and other agencies must continue our collaborations to achieve these ends.

Thank you for the opportunity to discuss NASA's activities to observe and understand our complex Earth system on all scales. I would be pleased to respond to questions.

Mr. SERRANO. Thank you.

Despite the White House's recent call for a new panel to review the science around climate change, the National Climate Assessment, along with the Intergovernmental Panel on Climate Change's recent report, these are the foremost documents explaining the changing climate, and its impacts on the planet and society.

For both witnesses, and if you could please just give me a yes or no answer to this, would you agree with that assessment?

Dr. JACOBS. Well, my agency was one of the 13 agencies that signed off on it. So, based on the assumptions that they made on the RCP projections, yes.

Dr. FREILICH. And for the same reasons NASA also signed off on it and was a foundational contributor; yes.

Mr. SERRANO. Thank you. Now I would like to walk through some of the top-level findings of the National Climate Assessment.

From the first two paragraphs of Chapter 1, it begins, "Earth's climate is now changing faster than at any point in the history of modern civilization, primarily as a result of human activities." Would you agree or disagree with this statement?

Dr. JACOBS. Certainly, if you remove natural variation like ENSO and PDO, then the remaining trend is anthropogenic.

Dr. FREILICH. Yes.

Mr. SERRANO. Continuing from the report, and I quote, "The impacts of global climate change are already being felt in the United States and are projected to intensify in the future." Would you agree or disagree with that statement?

Dr. JACOBS. All four scenarios, two of which were included in NCA4, trend upward; so, yes.

Dr. FREILICH. Yes.

Mr. SERRANO. "Further, the severity of future impacts will depend largely on actions taken to reduce greenhouse gas emissions and to adapt to the changes that will occur." Would you agree or disagree with that statement from the report?

Dr. JACOBS. It depends on which pathway you actually look at. The severity of 8.5 is obviously more severe than the other three, but certainly it is an undisputed fact that humans are producing the CO₂. What is not discussed in there is the removal of carbon sinks like vegetation.

So you can also increase the levels of CO₂ by removing the sinks.

Mr. SERRANO. Thank you. So you are saying that there is human cause, but there are other causes too, is your belief?

Dr. JACOBS. That is correct. And in most cases humans are removing the sinks as well.

Mr. SERRANO. And your answer?

Dr. FREILICH. Basically, yes. On the time scale of the next couple of centuries, what we do in terms of putting fossil fuel carbon into the atmosphere and not regulating, but removing and constraining carbon levels in the atmosphere will be the most important thing for defining our planet.

Mr. SERRANO. Thank you.

Now skipping down to the second paragraph of the report, "Climate-related risks will continue to grow without additional action." Would you agree or disagree with that statement?

Dr. JACOBS. NOAA's role in that report was just providing transparent and defensible information as far as the atmospheric measurements, so that is beyond the scope of our agency.

Mr. SERRANO. That is a yes or a no?

Dr. JACOBS. That is not what our agency is in charge of.

Mr. SERRANO. Yes, sir.

Dr. FREILICH. A similar answer from NASA. It is our job at NASA to make the measurements, to provide the understanding based on our research, and then to make that information available to you, the policymakers, to inform and guide your policy decisions.

Mr. SERRANO. "Decisions made today determine risk exposure for current and future generations that will either broaden or limit options to reduce the negative consequences of climate change." That is another part of the report; would you agree with that, yes or no?

Dr. JACOBS. Well, the report actually discusses that it doesn't evaluate the feasibility or socioeconomic assumptions with the RCP, so that is also probably beyond the scope of our agency.

Mr. SERRANO. Doctor?

Dr. FREILICH. Decisions made today will influence the evolution of our climate, yes.

Mr. SERRANO. Thank you.

Finally, and I quote, "While Americans are responding in ways that can bolster resilience and improve livelihoods, neither global efforts to mitigate the causes of climate change, nor regional efforts to adapt to the impacts, currently approach the scales needed to avoid substantial damage to the U.S. economy, environment, and human health and well-being over the coming decades."

Would you agree on that statement, with that statement, yes or no?

Dr. JACOBS. If the policymakers decide to address this, it certainly needs to be done on a global scale, not a regional scale.

Dr. FREILICH. And, again, that is quite policy-dependent. What we can do at NASA and in NOAA is, based on our measurements and our understanding and our models, we can present to you the regional and global impacts of potential impacts of policies that you may be considering.

Mr. SERRANO. Thank you for indulging me, gentlemen, with that, but I felt it was important to get all of that on the record. According to the U.S. Government's best scientists, we are not doing nearly enough to avoid substantial damage to our economy and human health from the impacts of climate change. I thank you both for your answers.

And Mr. Aderholt.

Mr. ADERHOLT. Thank you, Mr. Chairman.

There is a tendency among the general public in the climate debate to cite shorter-scale weather events as evidence for and against climate change. In your testimonies you said that thanks to satellite measurements and scientific analysis, you are increasingly able to detect climate threats and separate them from the environmental variability we know as weather.

Can you give us an example of a recent extreme weather event of variability that, while not inconsistent with the trends you associate with climate threats, you nevertheless would distinguish as separate from what you would consider evidence of climate change?

Dr. FREILICH. So the intent of the quote that you read was to say that we are able to understand the underlying trends in the midst of a lot of instantaneous variability, if you will, in the quantities that we are measuring. The short-term variability is what we call weather, and the longer-term variability and trends are related more to climate.

Now, what we have both said in our testimonies is that the changing climate is changing the statistics, the frequency and the intensity of weather events. So to say that a particular weather event—and studies have been done at the National Academies on this—is, quote, “the result of climate changing,” is not exactly precise. But to look at the sum total of weather events, where they are happening—extreme events—where they are happening, their magnitudes and their frequency, those statistics are being impacted by climate.

Mr. ADERHOLT. Dr. Jacobs.

Dr. JACOBS. So, to add to what Dr. Freilich just said, there are two other things.

So I would separate short-term natural climate variability from long-term trends. So, for example, we have an El Niño signal; in 1998, there was a very strong El Niño that produced extremely high temperatures. So a lot of—and that is still something that we would call climate, more climate than weather.

And then there are instances where you are actually looking at hurricane intensity and frequency of those, and a lot of those studies are actually done by using climate projections. So a future projection of what the sea surface temperature of water will be like 100 years from now and then running hurricane simulations with those projected conditions.

So the findings based on those studies, some of them show increased frequency, some show decreased frequency, most show increased intensity, but they are predictions based on predictions. So the underlying assumption is that one of those particular emissions scenarios will actually materialize.

Mr. ADERHOLT. What is, would you say is more difficult for scientists to predict, climate trends over the next 50 years or weather over the next 50 years?

Dr. JACOBS. Well, the skill of our weather forecast models is really limited to probably 2 weeks or less, but I would imagine that the evolution of the forecast skill in the weather model is improving quite rapidly. That is something that is an initiative of mine that we are working on right now.

The trends in climate rely on much more complex feedbacks and interactions. And so actually predicting changes in climate is far more complicated than predicting changes in weather.

Mr. ADERHOLT. Dr. Freilich.

Dr. FREILICH. I would agree with Dr. Jacobs on most of that. Again, the ultimate sort of 50-to-100-year evolution of our climate depends in not insignificant amounts on the policy decisions that you will be making, and those are not built into our climate predictions.

Earth is a very complex system; we have Earth system models, but, as Dr. Jacobs said, they are all based on particular assumptions about what humans will do, as well as knowledge that we

have generated on the Earth's natural processes and their interactions. That makes it a very complex prediction system, as Neil said.

Mr. ADERHOLT. So, between the two, would you agree that climate is more difficult?

Dr. FREILICH. I think so.

Dr. JACOBS. Yes.

Mr. ADERHOLT. All right.

Dr. FREILICH. But you phrased the question as predicting weather 50 years from now—

Mr. ADERHOLT. Yes.

Dr. FREILICH [continuing]. And I think that is probably—I think NOAA would agree that that is probably beyond our capabilities.

Dr. JACOBS. Yeah, I interpreted that to mean weather prediction 50 years from now—

Dr. FREILICH. Skill.

Dr. JACOBS [continuing]. Skill, not a 50-year weather prediction.

Mr. ADERHOLT. Right. Yes, exactly. [Laughter.]

That would be a little bit more difficult.

I yield back.

Mr. SERRANO. Thank you.

Just to remind everyone, we will rotate from one side to the other and speakers will be based on where you were when the gavel went down and seniority, but who was here at that time.

So, with that in mind, and no matter how I try to explain it, Mr. Cartwright is next.

Mr. CARTWRIGHT. I am going to take that as a compliment, Mr. Chairman.

Mr. SERRANO. It is a compliment.

Mr. CARTWRIGHT. Thank you.

Dr. Freilich, Dr. Jacobs, thank you for being here today. I want to talk about support for the scientific validity of the National Climate Assessment first.

Dr. Jacobs, in describing NOAA's role, you have said, "We have got a job to produce the most accurate, robust, and defensible science. Policymakers need to be able to trust the science." Have I quoted you correctly?

So are you and your staff faithfully fulfilling this responsibility?

Dr. JACOBS. Yes.

Mr. CARTWRIGHT. And did NOAA sign off on the National Climate Assessment? I think you already said so.

In Chapter 13 of the NCA it says, quote, "There is robust evidence from models and observations that climate change is worsening ozone pollution. This poses a significant challenge for air quality management."

And are those claims backed up by robust and defensible science?

Dr. JACOBS. Everything in there is based on peer-reviewed literature.

Mr. CARTWRIGHT. And in Chapter 14 of the NCA it says, quote, "The health and well-being of Americans are already affected by climate change," unquote, and that health will further deteriorate if climate change continues.

And, again, are those claims backed up by robust and defensible science?

Dr. JACOBS. That is beyond the scope of NOAA's jurisdiction.

Mr. CARTWRIGHT. From chapter 16 of the National Climate Assessment I read, quote, "Climate-related disasters in developing countries not only have significant regional, local and regional socioeconomic impacts, but also set back U.S. investments, humanitarian assistance, and national security."

Is that claim backed up by robust and defensible science?

Dr. JACOBS. Well, we monitor the storms, but not necessarily the socioeconomic impacts.

Mr. CARTWRIGHT. I will go to you Dr. Freilich. Is that claim backed up by robust and defensible science?

Dr. FREILICH. Again, the science on impact is extraordinarily complex, but the measurements of inputs and forcing is strong and robust and transparent.

Mr. CARTWRIGHT. OK. And, Dr. Freilich, when looking at the NCA, would you say that the projected climate change in the NCA is based on scientific and peer-reviewed data?

Dr. FREILICH. Absolutely.

Mr. CARTWRIGHT. And does the NCA represent our foremost experts, including yours and Dr. Jacobs' most accurate estimates of our climate future?

Dr. FREILICH. The NCA is a comprehensive, scientifically rigorous analysis and assessment of the available information primarily from the U.S. Government, yes.

Mr. CARTWRIGHT. And in fact in your written testimony I noted that you both bolded and italicized the words, quote, "know with certainty." Did I pick that up correctly?

Dr. FREILICH. You did.

Mr. CARTWRIGHT. And that was when you described climate change.

Recently, White House Press Secretary Sarah Sanders described the NCA as, quote, "The most extreme version and it is not based on facts," unquote.

So, Dr. Freilich, do you know who is advising Sarah Sanders on climate change?

Dr. FREILICH. I do not. NASA and NOAA are—is involved in the U.S. Global Change Research Program, that 13-agency program. We collaborate across the federal government and help to provide assessments such as the NCA—

Mr. CARTWRIGHT. I don't mean to interrupt, but I only have 5 minutes.

Dr. FREILICH. I'm sorry.

Mr. CARTWRIGHT. Did she check with you before making that statement?

Dr. FREILICH. No.

Mr. CARTWRIGHT. You, Dr. Jacobs?

Dr. JACOBS. So—

Mr. CARTWRIGHT. Did she check with you before making that statement?

Dr. JACOBS. No.

Mr. CARTWRIGHT. Okay.

Dr. JACOBS. The RCP 8.5 was the most extreme scenario, but the NCA4 also used 4.5, which is a more medium-range scenario, but the impacts attributed to each weren't specifically broken out.

Mr. CARTWRIGHT. Is Ms. Sanders' description an accurate representation of the NCA, Dr. Freilich?

Dr. FREILICH. Well, as you saw as I was talking perhaps, we have made measurements of climate indicators and many aspects of the Earth's system, and it is clear that the climate is changing from our long history of measurements and our transparent and open analyses that are available to everyone.

Mr. CARTWRIGHT. To say that it is not based on facts, is that an accurate representation by Sarah Sanders?

Dr. FREILICH. What we present are based on measurements and open analyses.

Mr. CARTWRIGHT. And both NASA and NOAA signed off on the NCA report; am I correct in that?

Dr. FREILICH. Correct.

Mr. CARTWRIGHT. All right, my 5 minutes are up. I yield back, Mr. Chairman.

Mr. SERRANO. Thank you.

Mr. Palazzo.

Mr. PALAZZO. Thank you, Mr. Chairman. And, Dr. Freilich, thank you for being here today. I want to congratulate you on your pending retirement. So, thank you for everything that you have done for NASA; your work hasn't gone unnoticed.

Dr. Jacobs, I also want to thank you for being here today. NOAA is a global leader in climate research, observing all the world's oceans and major seas. I am proud to represent the Mississippi Gulf Coast, which is home to NOAA's National Data Buoy Center.

For my colleagues who don't know, the center records crucial ocean data. From hurricane alerts to safeguarding our wildlife, Southern Mississippi knows the value of accurate and timely climate research.

So, Dr. Jacobs, can you speak to the important contributions the National Data Buoy Center makes to NOAA's research?

Dr. JACOBS. So the buoy data is extremely critical in both weather and climate forecasting, because collecting surface observations—in surface observations, not space-based observations, over the ocean is extremely complicated, because you have to physically be there.

Surface pressure obs are one of the most impactful observation that we put in the weather models. And these are also observations that we use to cross-check with sea surface temperatures that we derive from satellite imaging.

Mr. PALAZZO. Dr. Jacobs, also in your testimony you mentioned that implementing the Earth Prediction Innovation Center, EPIC, is among NOAA's highest priority; you state that it will directly benefit taxpayers.

Can you elaborate on what the program is and why it is so important?

Dr. JACOBS. Sure. So this particular center accelerates research to operations and we are streamlining our modeling suite by combining our weather models with the same dynamic core as our climate models, and packaging the software in a way that can be run

by the community. So various universities and academic institutions can download and run, and help develop and advance this software.

What we are also doing is porting this code over to cloud-based architecture, which addresses another problem which we have is limited high-performance computing resources. If we are able to actually scale research across cloud, we don't have a situation where our researchers are constrained to finite resources, so they have to execute experiments in series, now they can scale their experiments and execute them in parallel, which accelerates the research process.

Mr. PALAZZO. Dr. Freilich, this question is for you. You noted in your testimony that not all impacts of the changing climate are near-term negative, such as lengthening growing seasons, but you caution that these changes may disproportionately benefit nations other than the U.S., and my State of Mississippi is heavily dependent on agriculture.

So on what or whose economic analysis is this suggestion based? And can you explain how growing seasons have changed here in the U.S. and what regions of the country, in your opinion, will be most impacted?

Dr. FREILICH. Certainly. Before I answer that, let me just give one testimonial, additional testimonial to the National Data Buoy Center, NDB. Personally, in my research and with NASA, we have used critically National Data Buoy Center measurements, both to improve the accuracy of satellite measurements of winds over the ocean, and to validate and thereby decrease uncertainty in those satellite measurements. So they really play a critical role, as Dr. Jacobs said.

To go back to your main question. Perhaps the most recent comprehensive analysis was published in mid-September in the prestigious journal *Nature Climate Change*, where they actually did a countrywide, country-by-countrywide analysis of a number of different scenarios of changing climate. And what they found was that, based on various metrics, which are not all that important except that they are incredibly robust, they found that India, China, the U.S., and Saudi Arabia, surprisingly, were the countries that were most vulnerable overall economically to the changing climate, and that—in a negative way—and that Northern Europe, Canada, and the former Soviet Union were most benefitting from the changing climate, primarily in those cases because global temperatures or temperatures in those regions are lower than economically optimal now, but in a warming climate trend the temperatures would increase and therefore their economies would become more optimal.

In the United States, the National Climate Assessment looked at the impact of warming temperatures, among other things, and found that in particular in the Midwest, that was probably the most vulnerable area from an agriculture standpoint to increasing temperatures. And that indeed the climate assessment pointed out that, if things continue on the trends that they are on now, that our agricultural, national agricultural production might be reduced for climatic reasons to sort of mid-1980s levels, unless there were technological improvements in both agriculture and the climate trend.

Mr. PALAZZO. Well, thank you, gentlemen.

I yield back.

Ms. MENG. Thank you, Mr. Chairman and Mr. Ranking Member, for today's hearing, and thank you to the committee staff for all the preparation that went into today's discussion.

I also want to thank both of our witnesses, Dr. Jacobs and Dr. Freilich, for being here today, and thank you for your commitment to our nation. And I too want to congratulate Dr. Freilich for your upcoming retirement.

Climate change affects our environment, our public health, and our national security. Each year, more extreme weather incidents affect our nation, causing tragic loss of life and economic damage.

I represent parts of Queens, New York, and it's imperative for our district that we have a clear, research-based assessment about the effects of climate change.

My first question is about clean drinking water. In New York City, we draw almost all of our drinking water from the Catskill and Delaware watersheds. How concerned should we be in this country about our freshwater resources?

Dr. JACOBS. Well, I would certainly be concerned about it. Water is an essential natural resource.

Along those lines, something that NOAA is doing is experimenting with aquaculture, and one of the things that we found out through some of the aquaculture of various oysters is that they actually provide a tremendous amount of water-filtering capacity.

Ms. MENG. Are threats like aquifer salination in Florida, melting snow in the Rockies, or changes in precipitation and evaporation rates for standing bodies of fresh water, something that Congress should consider and work on?

Dr. FREILICH. All of those processes that you talked about are indeed important and indeed they are all measurable, not only *in situ*, but from space. One of our NASA missions, GRACE, and now GRACE Follow-On, makes precise measurements of gravity, which can be related to actual changes in aquifer levels. And so we can indeed monitor how the aquifer levels are changing relative to the natural processes to determine the impacts of human activity.

Dr. JACOBS. Well, I would like to take this opportunity to thank you for the support on the NIDIS reauthorization. So a lot of this is built into that, as well as the National Water Model System.

So not only is it something, as Dr. Freilich stated, that we can observe, we can also predict it. So the snow melt, the runoff, that is a lot of things that NOAA is actually running computer models on right now to forecast. And we are in the process of coupling our atmospheric models to our hydrology models, because, of course, you have to know exactly what the forecast is for the rain in order to understand where the runoff and snow pack will be.

Ms. MENG. Thank you.

My other question, Dr. Freilich, prior to joining NASA, you were a professor and Associate Dean in the College of Oceanic and Atmospheric Sciences at Oregon State University. Given both your testimony today, understanding our changing climate and research will continue to be very important to our nation's economy, well-being, and security.

What more can Congress do to support STEM education to ensure that our nation is producing the best scientists in the world?

And, in the interest of time, if I could ask my second, part too. And do you know of any potential gaps in STEM education that will affect our ability to track and understanding climate change? So what more can Congress do, but also our schools and even private corporations?

Dr. FREILICH. So I was going to address the impact of STEM not just at the higher levels of education, but throughout our system. STEM education, the scientific and logical approach to identifying and analyzing issues, is vitally important for our national strength as an overall society.

My personal experience, of course, has been at the upper levels of the education area. However, our daughter is a middle school biology teacher, and I can't emphasize enough how much support for rigorous STEM curriculum throughout the entire education system is vital to our nation for both male and female students.

Dr. JACOBS. One of the things that is extremely important for what we are doing for not just climate modeling, but weather modeling, is finding really qualified software engineers, and there is a major shortage in the government labs of software engineers for two reasons. The primary reason is we can't compete with industry, whether it is the video game industry or the coms industry, as far as recruiting and benefits and salary.

The other issue is a lot of these universities are teaching software languages that are different than what we use in our computer models, and the industry is rapidly evolving in a different direction than a lot of the code that we use.

Ms. MENG. Thank you, I yield back.

Mr. SERRANO. Mrs. Lawrence?

Mrs. LAWRENCE. Thank you.

Mr. Jacobs, I am from Michigan, and we just had a Michigan-Michigan State game, where do you sit when there is a South Carolina-North Carolina game. [Laughter.]

Dr. JACOBS. So I would have to say I am an ACC person.

Mrs. LAWRENCE. Oh, OK.

Dr. JACOBS. My wife went to Duke, as well as NC State, so—

Mrs. LAWRENCE. OK, let's get to work here. [Laughter.]

President Trump has proposed deep cuts to NOAA's Great Lakes Environmental Research Laboratory in his previous budgets. As you know, I am from Michigan, the third-largest source of freshwater in the world.

Can you tell us about the work of that lab and why it is important for the nation to continue funding that program?

Dr. JACOBS. Well, on the budget cuts, we had to make some difficult decisions, because the administration prioritized rebuilding the military and making investments in national security. So there were reductions, primarily to external funding, and we continued to fund the missions that were critical that were within the core mission of NOAA.

The research budget within OAR on the climate side was 98 million, oceans was 93, and weather was 91. So, despite the proposed cuts, climate was still funded more than weather.

The labs themselves are instrumental in doing model development work and forecasting, particularly on things like harmful algal blooms, and integrating a lot of the biological and ecological models with the hydrological and atmospheric models.

Mrs. LAWRENCE. So, would you say it is important for the nation to continue funding this program? Because as was stated by my colleague, freshwater and drinking water is becoming almost an emergency level. We must have safe, clean, and affordable drinking water to live, and I am very concerned when you start talking about reducing that funding. When we talk about national security, water is going to be a critical issue in America.

Dr. JACOBS. All of these programs are extremely important and it is just—you know, and we are in a situation where we had to make some difficult decisions.

Mrs. LAWRENCE. I think difficult and the fact that we want Americans to live with safe drinking water is a critical issue.

I want to ask this question to both of you, NASA and NOAA provide us with so much global observation data already, but where are there still gaps? What critical satellite data is still needed to refine our ability to track climate change?

One of the challenges we had is with data and I will say this on the record, this administration doesn't seem to grasp how important the data and the environment will play on us to be able to respond to the needs that we must—and so, can I get some comments from both of you about this.

Dr. JACOBS. So, the satellite data is extremely important, but I don't want to lose sight of the importance of the *in situ* data. So, on the satellite data, the values that we collect are essential, but the vertical resolution is probably the weakness. But as critical, if not more critical, is the ability to calibrate the satellites, and to do that, we actually need *in situ* observations to calibrate the satellite instruments with. And this goes for not just temperature and water vapor, but also aerosols and gases.

So, right now, we do have a program where we collect various gases with research instruments put on commercial airlines and then we use these gases to analyze and calibrate the satellite information. But this program, even though I would consider it not nearly as expensive as actually launching and deploying a satellite, without the ability to calibrate it, the data that we get is really limited.

Mrs. LAWRENCE. Thank you. Mr. Freilich.

Dr. FREILICH. Yeah, I agree with Dr. Jacobs. I will focus on three areas of measurements that are particularly amenable to advancement from space. The first one is, as Neil said, atmospheric composition. We have the nascent ability and we are constantly improving it to measure the composition and changes of greenhouse gases in the atmosphere. This is essential for running climate models. It is also essential for you to see the efficacy of policy decisions that you might be making locally in the global scale.

A second is vertical winds. This is at the very edge of our abilities right now. It addresses a portion of what Dr. Jacobs said about vertical knowledge and measurements in the atmosphere, and it will improve our models immensely if we can do it everywhere and

accurately, and it will help NOAA's forecasting of the weather and the environment on all scales.

The third place that I would personally highlight is soil moisture.

Mrs. LAWRENCE. Soil?

Dr. FREILICH. Soil moisture.

Mrs. LAWRENCE. OK.

Dr. FREILICH. The ability to globally understand, make measurements of agricultural decisions, if you will, both informs, locally, our farmers, and also provide some stability in terms of food security, understanding how crops in other areas might be impacting prices at home.

Mrs. LAWRENCE. Thank you so much. I yield back.

Mr. SERRANO. Thank you. Ms. Kaptur.

Ms. KAPTUR. Thank you, Mr. Chairman.

Welcome, gentlemen, and thank you for your expertise and for the years you are giving to our country. I hail from Ohio and represent the southern-most of the Great Lakes, Lake Erie, where we have had major challenges to our water system with the city of Toledo and other smaller water systems. So, we have experienced firsthand what is happening with climate change.

I also represent Brook Park NASA, named in honor of John Glenn, Glenn Lewis Labs at Brook Park, and we are very interested in your earth science work, relative to, as Congresswoman Lawrence talked about, the Great Lakes region. I am particularly interested in the NASA HAB, harmful algal bloom, monitoring and modeling, and the underlying need for us to spread our wings a little bit and work with universities in the region that are collecting data. There's all kinds of data, but it is not necessarily organized in a way that helps us target resources effectively.

So, my question really is: How are you working with all of the datasets that are being generated in the Great Lakes region, particularly, Lake Erie, which is the shallowest and most drawn-upon of the Great Lakes? As really as the canary in the coal mine for what's happening in the Great Lakes region, how can NASA exert more of a lead?

So, I loved your visuals, Dr. Freilich, and actually want to see if you have any others that are specifically focused on the Great Lakes, in terms of what Congresswoman Meng talked about in the STEM education programs, we have a Great Lakes Science Center in Cleveland which I represent and also at Toledo, Imagination Station. And we can have an enormous impact on the next generation if we can share your data in an understandable way from NOAA, from NASA, and draw young people into the reality of what's happening, targeted even right down to their region.

So, my question is: How are you—can you elaborate on your NASA harmful algal bloom monitoring program and the modeling that you are doing in collaboration with others in the region? And just FYI, I represent the largest watershed in the Great Lakes and if we don't get it right there, we are not going to get it right anywhere.

Dr. FREILICH. Absolutely. And we have a rather extensive harmful algal bloom program. We are in the process of developing the technology and the understanding to be able to predict the occurrences both, in inland waters and in coastal waters, of harmful

algal blooms and to track the blooms when they occur, this from space.

Now, with respect to, you mentioned the Toledo issue——

Ms. KAPTUR. Yes.

Dr. FREILICH [continuing]. Issue of several years ago.

Ms. KAPTUR. 2014.

Dr. FREILICH. When that giant harmful algal bloom took place, we actually funded and conducted aircraft flights——

Ms. KAPTUR. Yes.

Dr. FREILICH [continuing]. With aircraft instruments out of Glenn to monitor and track that bloom. Subsequent to that, some Glenn investigators put in a competitive, highly competitive proposal—it was one of only nine out of 43 proposals that were accepted—to continue aircraft flights over several years, and they are even continuing now to monitor and track water quality and algal blooms in the area.

One of the key elements of their proposal was the fact that they had brought together, just as you said, many different local institutions to pull the information and the understanding from the different groups in order to advance our knowledge of harmful algal blooms and their impacts.

Ms. KAPTUR. Yes, please let me know what more we can do there because we lived that crisis, and we are actually now, not sure, in terms of human health, we are looking at, apparently higher rates of Parkinson's and Lou Gehrig's Disease and we don't know the impact on human health of microcystin and some of the cyanobacteria that's in the algal blooms. And it seems like science has to run faster to catch up with what we are dealing with.

Also, in terms of agriculture—you mentioned agriculture—we are not sure whether the soil itself, because we have higher rainfall, whether some of that is growing in the soil. And NASA does not have the ability to penetrate with satellite imaging yet, what's in the soil. It would be nice to be able to give to our local weather reporters, hey, that sub watershed is really sick right now.

We don't have the ability to do that, and unfortunate—and I am just putting this on the record—we have the most tiled region in America, the Great Black Swamp; it extends over Indiana—I think Secretary Pence is aware of this or Vice President Pence is aware of this—Michigan, Western Ontario in Canada, and Ohio, obviously. But it is a giant soybean corn bowl and animal bowl, and we have more animals—10 times more animals than people—and it is very, very difficult to figure out why Lake Erie is getting sick.

We sort of know why, but we don't know from where or when, and so—and the water intakes are too high in the water in some of our cities and EPA does not provide any money, really, for them to rebuild their water systems. So, we have got this really critical moment, and it seems like the Federal Government is tiptoeing. If you can have any influence inside the administration, we really need a strike force for Lake Erie—that is what we need—and for this most-troubled watershed. So, if you could make recommendations to the record on that, I would greatly appreciate it.

Thank you, Mr. Chairman.

Mr. SERRANO. Thank you. Well, Mr. Crist just came in, so——

Mr. CRIST. Hi.

Mr. SERRANO [continuing]. Mr. Crist, if you are ready, we are ready.

Mr. CRIST. Yes, sir. Good morning. Sorry I am late; I am double-booked today, but it is great to be with you and I appreciate the opportunities. Thank you very much, Mr. Chairman. And I want to thank our witnesses for being here; I appreciate your presence.

I am grateful this subcommittee has chosen climate change as its first point of discussion, Mr. Chairman, for the 116th Congress. This is a topic that is near and dear to my heart and one that is incredibly relevant to my district in Florida. I represent Pinellas County, Florida. It is on the West Coast and includes the cities of St. Petersburg and Clearwater. Sea-level rise, nuisance flooding, saltwater intrusion, worsening weather, these impacts are real; they are happening now and my constituents see it every single day.

According to a recent analysis published in Science Journal, oceans are warming up to 40 percent faster than previously thought. Both witnesses, I am curious, what does this accelerated warming mean for our oceans and for our whether—either of you?

Dr. FREILICH. OK. Well, thank you very much. The vast majority, more than 90 percent of the excess heat that is being put into the Earth's system is actually being manifested in the ocean. There's obviously a lot of focus on surface temperatures, but the heat, itself, is in the ocean. It has tremendous potential for rapid and, otherwise, changing environment and climate change, should that subsurface heat, which was discussed in the Science article, make it to the surface and then to the atmosphere.

We are able to make measurements both, *in situ* and from space, to give us a more complete three dimensional—two horizontals and vertical—picture of the heat distribution throughout the oceans right now. That is where technology and models have come together in both, NOAA and NASA, to give us a more complete view of the environment and how it might change in the future.

Dr. JACOBS. I would also like to highlight NOAA's Argo observing system, which are these profilers that go up and down in the water column and collect information. It is not easy to actually observe the oceans below the surface. We can do the surface relatively simple and straightforward with satellites—relatively—but the Argo system is incredibly valuable, because if we are going to run coupled climate models where we have an atmosphere coupled to an ocean model, the ocean model is going to need *in situ* observations and data assimilation. And so, for both, the initialization perspective as well as the model-verification perspective, these observing systems are critical.

Mr. CRIST. Thank you. And can you address what the human and economic consequences of this are.

Dr. JACOBS. That would really go beyond the scope. I know, as mentioned, our mission is just to make sure that the policymakers have the most accurate projections that we can produce.

Dr. FREILICH. I will go a bit farther, but still focusing on the physical manifestations of this. The Earth's environment is basically defined by two great fluid systems, the atmosphere and the ocean; they couple over 70 percent of the Earth's surface. And understanding the internal dynamics and the exchanges between the

two defines our environment, and then results in human and economic impacts.

One of the graphics that we showed, actually, was sea-level rise, and you talked about that. We were making incredibly precise measurements of global and regional sea-level rise and we understand why, because the satellites are telling us that two-thirds—half to two-thirds of the sea-level rise is coming from putting more water into the ocean, by melting glaciers and ice sheets.

But the other portion is coming from expansion of the water that's in the ocean. As the ocean warms, it expands, just like the fluid in your thermometer, and that causes sea-level rise, too. From a human standpoint, it is just higher. We can not only see what's happening, but we can see why it is happening.

Mr. CRIST. Does that mean I have to stop? I yield back.

Mr. SERRANO. Thank you. We will get a second round, now.

Dr. Freilich, would you please contribute, if you have examples of how you are providing useful climate-related information, based on your measurements to technical and non-technical decision-makers.

Dr. FREILICH. One example of this is through our applications program which is designed specifically to take the measurements and the understanding that we get from satellites and research and make focused-information products that address the questions of non-technical users, such as: What are the statistics of surface wind velocities? What will the statistics of surface temperatures be? How will precipitation change into the future?

These impact, particularly, people like architects and infrastructure designers who have to make decisions today about what the conditions are going to be 50 years from now when their buildings and infrastructure are still going to be standing. We provide the measurements there today and the model estimates into the future in ways that can be accessed by, as I say, non-satellite weenies, that is, non-technical people, specifically through our applied sciences program.

Mr. SERRANO. Do you find any of the same discussion that takes place, in general—and certainly in Congress—about those who believe there's a problem, those who believe that the problem is not—when this information goes out, are there people who reject it and say, you know, that's what I am looking for or I don't need that information or it is not convincing enough?

Dr. FREILICH. The people on the ground need the information. Designers have got to—architects have got to design buildings, et cetera. So, it is not a question of not needing the information.

What we strive hard to do is to understand the specific information that is needed and it is often very difficult for the user to articulate what he or she is looking for in terms of environmental information. And that's the role that our applied sciences program place, sort of a flexible bridge between the non-technical users on the end and what we know and what we can provide on the other end.

The key is to provide information in accessible and an efficient way for the non-technical user, not to present, you know, a course in environmental science for them, and that's what we try to do in our applied sciences program.

Mr. SERRANO. Thank you. Either one or both: Puerto Rico has been devastated by recent hurricanes and the Federal Government, in partnership with the local government, are investing heavily in ecosystem restoration and repairing infrastructure. How are you educating the public and local officials about the increasing systemic risks to the island? Could you explain what specific impacts are expected there, either one or both.

Dr. JACOBS. I can touch on that from two different aspects. One is just general hurricane-intensity forecasting work that we are doing, and not just on hurricane intensity, but also on tracks. So, improving our capability of predicting rapid intensification and track within the weather models, with specific to that event, we did a lot of aerial surveys after. We worked with the Department of Defense and acquired two Marine Corps radars to install so that we would have radar capability there after the storm.

Another thing that is—that we are working on is with the support of FEMA is actually studying the coral system around the island, because the corals are actually very important because they act as a way to dissipate wave energy. So, about 95 to 96 percent of the waves' energy are dissipated by the coral reefs.

Dr. FREILICH. Another area of reaching out to the public about environmental impact, relative to Puerto Rico that can be highlighted comes from the joint, NOAA-NASA Suomi NPP satellite, which was flying then and is flying now. It has an instrument on it called "VIIRS" that has an exquisitely sensitive day/night band, and so, it can image during the night when there's only starlight or moonlight or not at all.

Interestingly enough, when there is a natural disaster like in Puerto Rico and the power systems go down, areas that were previously bright because they had lights, turn dark, and the Suomi NPP images of Puerto Rico and other places have profound impacts on the public because you can see the city was there and now this whole area is black at night because the power is out and remains out. And you can track how we are recovering from it. This is powerful connection between technology and public understanding.

Mr. SERRANO. Let me end my round by staying there for a second—and I am sure there are arguments back and forth about this—Puerto Rico deals with hurricanes every year or every couple of years, but the phrase that's used is "No one saw this one coming" to that extent, to the damage that it caused. First of all, do you think that is true, that there was enough information out there to say that this was going to be a monster of a storm or did it catch people by surprise? Was it the human failure and not being prepared or was it so severe that it couldn't have been prepared for it?

Dr. JACOBS. Well, I think what we are dealing with here is a forecasting intensity problem. Obviously, before satellite imagery, no one saw these storms coming if they never made landfall. But the capability that we have now, as far as ability to forecast track, really trails off around day five. So, that gives you roughly five days or less.

That also requires that the storm is initialized in the model. So, if there's areas of weakness in the model, it is trying to predict

when the actual storm will develop. Once it is already there, the model usually handles the track fairly well.

The other hurdle is rapid intensification. There's a lot of modification that the storm does to the water underneath it and it is very hard to derive accurate sea-surface temperatures from remotely sensed satellite data beneath the clouds that are obscuring the visibility of the waters. So, you know, that's one of the areas that we are focusing some research on right now with the rapid intensification of hurricanes.

Mr. SERRANO. Thank you. Any comments on that?

Dr. FREILICH. NASA and NOAA are collaborating exceedingly well to get the information that's necessary to initialize the model and to understand processes such as rapid intensification. So, you see that the models are improving year by year—NOAA models are improving year by year by year.

Mr. SERRANO. Thank you to both.

Mr. Aderholt.

Mr. ADERHOLT. As a result of climate change, what does science predict—and this will be for either or both of you—in increased rates of precipitation or decreased rates of precipitation?

Dr. FREILICH. I will take that. In general, it is intensification of the hydrologic cycle. What does that actually mean? Higher highs and lower lows is what the models are basically predicting; that is, rainy areas are becoming rainier and extreme precipitation events are becoming more frequent or at least more precipitation. But the low, also, is getting larger; that is, droughts are becoming longer and more widespread.

So, it is not an all one kind or the other kind; it is an intensification of the cycle, the peak-to-peak difference.

Dr. JACOBS. I would just add that it is—you know, this is going back to our conversation about how complex the climate system is—a lot of these processes have multiple feedback mechanisms and they operate in a non-linear fashion. So, some of them may self-mitigate; others may scale the opposite direction.

Mr. ADERHOLT. Are we more likely to see the current climates become worse or my drier climates become wetter or vice-versa? And that may be a little bit of what Dr. Freilich was saying earlier.

Dr. FREILICH. In general, drier is become more dry and wetter is becoming more wet.

Mr. ADERHOLT. How might uncertainties, with regard to physical modeling of cloud and water vapor feedback, affect your ability to accurately assess long-term future of the climate? And what are some other outstanding scientific questions that inject uncertainty in your predictions?

Dr. JACOBS. Well, there are quite a few areas of uncertainty in the climate models. The feedbacks are obviously one. Another one is the sinks. There was a paper published last week in *Nature* that showed that the climate models are actually underestimating the CO₂ uptake from a lot of vegetation.

Additional areas are aerosols and clouds. A lot of times these aerosols act as condensation nuclei for formation of clouds. That's a complex process that's not easy to model.

In addition to that, a lot of interaction with the solar outlet. Right now we have, with a great collaboration with NASA, the abil-

ity to observe the sun, but actually predicting what the sun will do is very complicated.

Dr. FREILICH. Dr. Jacobs hit the nail on the head: It is the interactions between the processes that are key and the interaction between scales and those are exceedingly complex.

Mr. ADERHOLT. Well, I think we will all agree that when interpreting data to reach conclusions that inform public policy, and us as public policymakers, it is critical to ensure an objective assessment of available data. How does your agencies encourage a diversity of research opinions on the subject of climate change to confront the issue of scientific bias?

Dr. FREILICH. I will speak for NASA.

Mr. ADERHOLT. OK. Yeah.

Dr. FREILICH. So, virtually all of our research programs are competitively selected and we, and the Science Mission Directorate, actually, are constantly looking at whether—how the results of that peer-review process are being subtly biased or not. But the peer-review process has shown itself to identify the best research, the best use of the nation's dollars in general.

We make all of our measurements freely and openly available. We make all of our model code freely and openly available. And our approaches are well-documented, as is the case with NOAA. So, making things available in a useful way lowers the barrier of entry for anyone who wishes to duplicate or do their own analyses.

We spend, in the Earth Science Division, more than 10 percent of our budget every year on data systems, making the measurements and the information widely available.

Dr. JACOBS. So, we have an internal peer-review process, as well, and when our science is published in journals, they also—the journal, itself, has a peer-review process.

One of the interesting things that I have noticed with respect to the appearance of bias in high confidence versus low confidence, is that there is not a motivation to publish scientific research that you have low confidence in. It probably wouldn't get past the peer-review process if you did not have high confidence in it. So, what ends up happening is there's an appearance of having high confidence in this and high confidence in that because the low-confidence research does not make it through the peer-review process.

Also, as Dr. Freilich said, we make all of our code, as well as our data, available. And one of the things that we have been working on with the commercial cloud vendors is NOAA's Big Data program and that's—the commercial cloud vendors are actually hosting our data for us and developing software interactions so that anyone, whether it is a university or just someone at home, can access our data, access the code, and actually replicate a lot of what we have produced in our labs.

Mr. ADERHOLT. Is my time up or are we—thank you.

Mr. SERRANO. Mr. Crist.

Mr. CRIST. Thank you, Mr. Chairman.

Over the past year, the State of Florida, including the district I represent, was plagued by a historic outbreak of red tide. As of last October, businesses in my home of Pinellas County, reported almost 1.6 million in losses due to red tide. Hotels reported a 6 percent drop in overnight bookings, and that's just one county.

While the economic impact is glaringly obvious and while we know that red tide is a naturally occurring organism in the Gulf of Mexico, confusion remains as to why this past year's bloom was so severe. Do you think climate change and warming oceans could be playing a role in this?

Dr. JACOBS. So, with respect to the interactions with the water and the algae, there's a threshold. So, in general, dissolved oxygen content is higher in colder water and lower in warmer water. But most of these algae bloom in a sweet spot of temperature ranges. A lot of times, what ends up triggering the bloom is a precipitation event of such that creates a runoff of fertilizer, so there's nitrogen and phosphate. And a lot of times, that is actually the mechanism that triggers the bloom and then the photosynthetic algae actually remove the rest of the oxygen from the water causing a hypoxia.

One of the things that we are doing is actually through the National Water Center and the National Water Model is trying to integrate the atmospheric precipitation forecasts with the water model that forecasts runoff and that, the unknown there being the amount of fertilizer that's captured in the runoff, but at least we should get to a state soon where we are doing fairly well in predicting a lot of these blooms.

Mr. CRIST. What do you think is needed to help us better understand and respond to harmful algae blooms?

Dr. JACOBS. I would say possibly some additional measurements of chemistry in the water, also, additional stream gauges and monitoring so that we can both, initialize, as well as calibrate the water model. There's probably also a need to integrate a lot of the water model with flow-restricted areas. So, in some cases where you have dams and such that are actually—there's a human there controlling the water rate, that is something that we would need to integrate, as well.

Mr. CRIST. Can you discuss, Dr. Jacobs, the opportunity that small satellites, particularly small satellite constellations currently operated by commercial companies, can play in collecting or providing data to understand climate change.

Dr. JACOBS. So, the CubeSat industry is just now, I believe, starting to take off. And the data that they are providing, particularly with the GPS radio occultation data, is incredibly valued. It is one of the few remotely sensed observations that's an actual measurement that does not necessarily need to be bias corrected. So, we have temperature and moisture profiles from these as good as what we would get from COSMIC Data, which is a program that we run.

The interest that I have is actually being able to acquire this data as a subscription service, which is, you know, it is very convenient for us. It is very cost-effective, and if there's more than one purchaser of the data, say other international met services elsewhere, it would essentially drive down the cost of the data for us because we would be splitting the cost over other international met centers.

Dr. FREILICH. If I could say a word from the NASA side?

Mr. CRIST. Please.

Dr. FREILICH. We also see great potential in private-sector, small-satellite constellations. And we have in place right now a

pilot program with contracts in place with three different commercial firms who are flying small satellite constellations observing the Earth. And we are basically purchasing their data and evaluating its contributions and its value to advance our research agenda. So, they are flying these for their own reasons. We are not imposing requirements on them. We are saying, since you have it, we will buy it and evaluate how useful it is and then go in for a long-term contract if, indeed, it is useful, and we are finding it to be.

Dr. JACOBS. And we have a similar pilot program where we are acquiring and evaluating the impact of data on our model, as well.

Mr. CRIST. Wonderful. Dr. Freilich—I hope I am pronouncing that correct—

Dr. FREILICH. Close enough.

Mr. CRIST. Thank you. In your written testimony, you stated that we are increasingly able to detect climate trends and separate them from much larger/shorter scale environmental variability we call weather. Can you elaborate on what you mean by that.

Dr. FREILICH. Yes. If you think of weather in a particular variable as causing rapid fluctuations—maybe the temperature goes up or goes down or the rain happens or it does not happen—the climate change—the climate trend is underneath that. So, if you look for only a small period of time, you see weather fluctuations going up and down.

But if you make continuous, long-term, intercalibrated measurements of the underlying variable, you may indeed—and we are—seeing that those fluctuations are on a base which is changing over time. The satellite measurements, because they are global, because they are continuous, and because they are consistent over time, allow us to average out, if you will, the weather fluctuations and expose quantitatively, the longer-term variability.

Mr. CRIST. Thank you. I yield back.

Mr. SERRANO. Mr. Palazzo.

Mr. PALAZZO. Thank you, Mr. Chairman.

It is Dr. Freilich, right?

Dr. FREILICH. That is—

Mr. PALAZZO. Is that correct?

Dr. FREILICH [continuing]. Precisely correct.

Mr. PALAZZO. Thank you.

Dr. FREILICH. We can go into how the different portions of our family pronounced it differently.

Mr. PALAZZO. It is the same with Palazzo or Palazzo; it depends on where you are from.

Dr. FREILICH. Yes.

Mr. PALAZZO. I have heard both of you talk about hypoxia and the algae blooms, and I know Congressman Crist and I, you know, we are Gulf States and it is extremely important having a healthy Gulf. And the Mississippi River Basin is the fourth largest in the world; 32 states drain into the Mississippi River Basin—Canada—and I know we have had what has been called the “Mississippi River/Gulf of Mexico Hypoxia Task Force.” I’m not sure if there’s a NOAA or EPA or if there’s multiple agencies that are involved in that.

But the dead zone does not seem to be shrinking. And I know there have been a lot of flooding events and there’s the nine-point

source pollution coming from AG and other urban areas. Again, 32 states pouring, you know, all this pollution point and nine-point source going into the Mississippi River and it is flowing into the Gulf of Mexico.

Are we making a difference and what can we do to maybe work towards eliminating the hypoxia task force? And I think some of the comments that you have already made will probably apply to the dead zone and the Gulf of Mexico, as well, but I would just like to hear y'all's summary and we will start with Dr. Jacobs.

Dr. JACOBS. We are just now on sort of the cutting edge of trying to predict and understand that interaction and the research and forecast it. So, it is one of those things where if we can understand the physical mechanisms and biological mechanisms, then we can probably do a better job of quantifying future impacts and potential mitigation capable. But to do it empirically would require lengthy observation time, which is probably something that we might not have.

Dr. FREILICH. Dr. Jacobs' answer was actually quite comprehensive.

Mr. PALAZZO. All right. You brought up aquaculture, so, between hypoxia and aquaculture, two parochial interests of mine in my home state. And I guess there's no comprehensive, nationwide permitting process for aquaculture in federal water, which I think has probably hindered America and people wanting to get into the aquaculture business because there's no certainty. There's the permitting process. The bureaucracies are intense, but, yet, we are bringing in more imported seafood and it is not the same quality, as I believe, the seafood that we find in our oceans and our seas that connect to America. But, I guess—and there's a huge deficit, a trade deficit with various countries.

So, it is not just a foot-safety issue—and we have had these conversations before—but it is also, you know, under, I guess it is the jobs and economic, because these dumping of seafoods is hurting our farmers. And so, I guess, how would you describe the permitting process and what can we do to improve it?

And I say all this because there was a bill that Chairman Peterson and I introduced last year. It is called the "AQUAA Act"; it is the Advancing the Quality and Understanding of American Aquaculture. It is a bipartisan bill. We are going to be reintroducing it this year, and we did have a lot of input from the professionals at NOAA.

And so, if you could, Dr. Jacobs, I would love to hear your thoughts on it.

Dr. JACOBS. So, the seafood—addressing the seafood-trade deficit is one of our top priorities, as part of the Blue Economy Initiative and it is something that Admiral Gallaudet has been working on extensively and we do have a strategy and a plan that we are in the process of putting together, and I would love the opportunity to provide that for the record.

Mr. PALAZZO. OK. Well, fantastic. Because, you know, future populations and having healthy, sustainable, and affordable seafood is going to be extremely important. And not only will it benefit coastal states on the East Coast, West Coast, Gulf Coast, but also our farmers in our ag states, because they will be providing the soy-

bean and corn food stock that will be going into the feedstock for the aquaculture. So, yes, I will look forward to hearing your statement.

Mr. SERRANO. So, in terms of pronouncing names, in the Bronx, where the real Little Italy is—it is not the one in Manhattan; it is on Belmont Avenue—we put a T in it: Palazzo.

Mr. PALAZZO. It is Sicilian. It is Palazzo.

Mr. SERRANO. It is not pizza; it is pizza, right?

Mr. PALAZZO. Yeah, both are good.

Mr. SERRANO. Ms. Kaptur.

Ms. KAPTUR. Thank you, Mr. Chairman. Your meetings are always instructive.

Dr. Freilich, let me also, again, thank you for your service to our country and wish you well in the coming years. Could I ask you, could you provide to the record, the 17 satellites you mentioned for earth monitoring and their purpose, and did I get the number correct?

Dr. FREILICH. We have 22 satellites—

Ms. KAPTUR. Twenty two.

Dr. FREILICH [continuing]. In major missions on orbit and 14 more coming through fiscal year 2022.

Ms. KAPTUR. Great. Could you just provide a list of those?

Dr. FREILICH. Absolutely.

Ms. KAPTUR. That would be very helpful.

And Dr. Jacobs, you used the term “flow rate” and one of the challenges that we are facing in the western basin of Lake Erie is much heavier rainfall and the inability of NASA’s satellites yet to pierce the soil, so we know what’s happening and where the water is moving. Just to give a sense of the daunting challenge to the lake, we have to hold back water flow and have slow and leaching to the lake. We have no means to do that right now. We have the most tiled region in America and every time it rains, it flows like a superhighway to Lake Erie and half of the land in the watershed is absentee-owned.

So, the challenge to us with these changing conditions is to be much more engineering-wise and we don’t have a mechanism—and I am urging you to think about the administration, working with us—and I am going to invite you, if both of you could come, to target the information that you have and appear before the Great Lakes Task Force, which is bipartisan group of members here in the House, to talk about the Great Lakes.

And if you could call from the data that you have to give us better guidance, maybe we could do better than we are currently doing. But, quite frankly, in meeting with one farmer recently, he said, Congresswoman, I can’t hold the water back. We’d have to change our whole tiling system. So, we would have to work with the Department of Agriculture and invest a whole lot of money to try to figure out how to hold this water back and to probably filter it in some way that we haven’t had to do in past generations.

It isn’t just a matter of not applying more fertilizer to the soil. There are legacy nutrients in the soil and maybe things that happened when the soil was first created that are flowing into the lake, and we can’t save the lake without reengineering the water-

shed, in my opinion. So, data you could provide us specific to that region could be very helpful.

I don't know if you have seen a film—I wish we would have made it in this country, a documentary called “Planet Ocean” done by Yann Arthus-Bertrand and Michael Pitiot. I guess the ocean surrounds them so they think about it more. I just love that film.

And as I looked, Doctor, at what you put up there NASA, I thought, OK, I am going to push you a little bit further. Take a look at their film and see what each of you might have in your treasure chest in your departments and agencies and what could we tell the American people about the United States of America in the way that the Aussies did in that particular documentary. I think it could be very important to public education and, frankly, to education of members here. So, I would suggest that.

Finally, I just wanted to ask you in the time remaining for me, could you discuss, based on your work, trends you see in desertification in our country, talk about the Great Lakes where 80 percent of the fresh surface water of the United States exists, and also coastal impacts. Congressman Crist is here with us today from Florida.

Do you have any comments that you want to make to us about our arid West, about our coastal regions, or about the Great Lakes that are summary remarks, thoughts that you have had as you look through the datasets that would give us guidance as members?

Dr. FREILICH. I will take that.

Ms. KAPTUR. It is a hard question, but——

Dr. FREILICH. It is. By the way, as an oceanographer, I resonate with your sentiments about the ocean, absolutely. So, thank you very much.

Ms. KAPTUR. I did not know you were an oceanographer. Well, watch the film and tell me if you think it is as good as I think it is.

Dr. FREILICH. It is.

Ms. KAPTUR. OK. You have seen it, OK.

Dr. FREILICH. So, my answer would go back to the discussion that we had previously with Mr. Aderholt in terms of intensification of the hydrologic cycle. Although we have the ability, technologically and infrastructurally, in this country to mitigate some of that, there is an increasing trend towards drier dry areas. And especially in the West—not in your area—the precipitation patterns are leading to water stored in snow packs, which is where most of the water comes from for agriculture in the West, has been changing. So, the drier dries and the change in precipitation amounts have evidenced themselves, generally in terms of increased dropdown of aquifers.

Ms. KAPTUR. All right. Knowing that and looking 50 years out, over half of our fruits and vegetables now come from one state, do you see that changing in the future because of the availability of water?

Dr. FREILICH. I don't know.

Ms. KAPTUR. You don't know.

Dr. FREILICH. It is beyond my expertise, I'm sorry.

Mr. SERRANO. We will try a couple more questions and then we will call it a morning, and we thank you for your testimony today.

Some communities are already making massive investments to protect themselves from climate impacts. New York City, for instance, has a massive plan to build barriers to protect itself from another Superstorm Sandy. These types of investments are enormous and should be made with the best possible information about climate change and the risks that it imposes.

For both of you, what are the most important investments to make in climate science and research so that we can reduce the uncertainty with regard to these risks?

Dr. JACOBS. I would say I would categorize the investments in three areas. The first one is observations. This is critical both, for in situ observations for initializing models, as well as, validating predictions.

And then the modeling, both, weather modeling and climate modeling, we are slowly closing the gap between weather models and climate models and we are actually learning from the development of both sides to benefit the other.

The last one is investment and computer resources, both, HPC and cloud-based computer resources. Because in order to do these computations, it requires a tremendous amount of computing capability.

Dr. FREILICH. Spot-on: Measurements, models, and communications of the results.

Mr. SERRANO. I am hoping, Mr. Aderholt, that every panel we have from now on agrees with each other as much as this.

Dr. FREILICH. NASA and NOAA have been working together extraordinarily profitably for an exceedingly long time.

Mr. SERRANO. I understand. Related to this, what do each of you consider to be the greatest unknowns in climate modeling today and what are your agencies doing to address these?

Dr. JACOBS. In no particular order, I think the real changes in climate modeling are understanding the feedbacks and the interactions, the various CO₂ sinks, the cloud aerosols, and getting accurate initialization from those, and then understanding the natural patterns. Because in order to isolate any sort of anthropogenic patterns, we need to understand the natural signals and be able to subtract those off.

Dr. FREILICH. OK. Dr. Jacobs, again, was spot-on. I want to focus a bit on the natural extended sources and sinks of carbon dioxide, not the point sources.

On average, about half of the anthropogenic CO₂ that we put into the atmosphere stays in the atmosphere. The other half goes to the land and the ocean in ways that we don't entirely understand. And some years, almost all of the CO₂ that we put into the atmosphere globally stays in the atmosphere and in some years, almost done of it stays in the atmosphere for more than a few months.

Understanding the sources and the sinks in the oceans and the boreal forests and how they interact and how they will change in a changing environment is critical for understanding what the atmospheric composition is going to be in the future, and, therefore, the radiation balance.

Mr. SERRANO. Thank you. Is that all?

Mr. ADERHOLT. Let me just follow up on that. Dr. Jacobs, you mentioned that substantial progress has been made over the last several decades in earth science—earth systems science observation modeling, but the mission remains incomplete and many questions still remain unanswered. Can you go a little further and explain, you know, what you would say what the questions remain unanswered and what additional advancements can be made to address these outstanding questions.

Dr. JACOBS. Well, there's—so, I guess I would bin this into two categories. One would be: What are the assumptions in the respective concentration pathways? So, there's four different pathways; there's a 2.6, a 4.5, 6, and 8.5 ranging from very minor emission increases to very extreme emissions increases.

Now, there's assumptions based on those; 8.5 is associated with a higher population growth and less technology innovation. And 4.5 is lower population growth and higher technological innovations. This is beyond the scope of NOAA's mission to evaluate the feasibility of these, but I do think as policymakers, the baseline assumptions of the RCP scenarios should be analyzed, and then when we—NOAA—actually used these various scenarios to then project what we think the climate and weather is going to do based on those scenarios.

And I am confident that we are making a lot of progress in our understanding of the science when we initialize with those scenarios what the outcomes will be, but a lot of the question, I think, is really on what are the scenarios going to be?

Mr. ADERHOLT. Will any of these advancements be able to slow global warming in the short-term?

Dr. JACOBS. Really, as part of NOAA's mission, we are just observing the trends in the atmosphere, and trying to predict them, it is really up to the policymakers to decide if they want to implement something one way or another that may or may not make a difference.

Mr. ADERHOLT. Mr. Freilich, did you want to add anything?

Dr. FREILICH. Same. NASA makes the measurements, does the analysis, and informs you. Then, once you make a policy decision, together we monitor the earth's system to see whether the impact is what you had expected.

Mr. ADERHOLT. All right. I will yield back.

Mr. SERRANO. Ms. Kaptur.

Ms. KAPTUR. Thank you, Mr. Chairman.

I just wanted to follow up on my prior request. Would it be achievable for both of you to meet with the Great Lakes Task Force and reduce your data granularly to the Great Lakes Region or is your data more diffuse?

Dr. FREILICH. I will speak personally for myself. I am sure that NASA would be happy to do that. In three days, I will be retired.

Ms. KAPTUR. Only three days.

Dr. Jacobs?

Dr. JACOBS. Absolutely.

Ms. KAPTUR. All right. I did not know at what level your data existed; that's why I was asking the question.

Dr. JACOBS. So, our—well, it depends on the various data sources. Some of it is extremely high resolution, both the space and

time, and some of it is fairly sparse. But we do make that accessible and available to the public, as well as the software that we use to process it. And that's all—you can go online and get that now.

Ms. KAPTUR. All right. It would be nice to hear how you are collaboratively working in different regions of the country and reduce it in ways that we can act on, then. That would be very helpful to us.

I wanted to ask a question about—two questions and then I will be finished—one is: Is it possible that what we are experiencing is being heavily influenced by changes in the earth's orbit or its positioning? That, in fact, there is more going on than just human behavior and its influence, but there is something going on, as well, in space.

And, secondly, what do each of you have to present today or in the future to the record, about energy and the use of energy on earth and the earth's environment?

Dr. FREILICH. So, to address your first question, there are undoubtedly changes that are happening on very long time scales, because we know that the climate has changed on long time scales, back throughout the history of the Earth; however, what we are seeing today are environmental changes that are happening far more rapidly than could be accounted for by things like orbital dynamics of the Earth and, therefore, must be the result of other factors.

But both things are happening, long-term changes and short-term changes. The short-term changes right now are happening intensely and, of course, rapidly.

Ms. KAPTUR. I think one of the most effective photos NASA put out was the one showing the ozone layer healing because of decisions that we made as intelligent beings. Obviously, with some of the other challenges that we face, we have some work to do, but I thought that was very effective and it showed working together we can make progress.

Do you wish to comment, Dr. Jacobs?

Dr. JACOBS. That was a great answer. I have nothing to add.

Ms. KAPTUR. OK. What about energy in the environment? What about satellite imaging of changes in the use of energy with population growth? Do you have any time-series data that would help us see how we, collectively, as humanity, impact the environment because of our use of energy?

Dr. FREILICH. Well, I would say that the issue isn't necessarily the use of energy, but how it is that we generate that energy. If we generate that energy by burning fossil carbon and adding that to the system, that has one kind of environmental impact. If we generate that energy in other ways, then the environmental impact of the same amount of energy will be much different. So, it is not the energy itself, it is how we got it.

Dr. JACOBS. I would just add to that, that NOAA does provide high-resolution wind forecasts, as well as cloud forecast and such, that can be used by renewable wind energy and solar farms, but we don't actually—beyond the scope of providing that atmospheric information, that's where our jurisdiction stops.

Ms. KAPTUR. All right. Thank you both very much.

Thank you, Mr. Chairman.

Mr. SERRANO. Thank you. This has been a very interesting hearing and one that continues to be an issue of much contention. As I said at the beginning of the hearing, either in making a bad attempt at humor or being profoundly sarcastic, if we can't agree on what to call it, then maybe we can just agree that something is going on. And you folks are doing a great job of trying to find out what is going on and telling us, you know, what may be causing it or not causing it.

But it would seem to me that there is a large amount of this, if not all of it, caused by we, ourselves, who inhabit this planet. And it is the planet we have. It is the only planet that we know that we can be on right now. NASA hasn't shown us that we can be on another planet yet, although, I think that is coming soon.

But one of the reasons that I love this committee and one of the reasons that I wanted very much to get an opportunity to chair this committee or be ranking member as I was in the past, is because of these two agencies that are in front of us now. You do such important work and such important work for the American people to help us along to understand where we are.

Just for the record, as far as NOAA, I have always said that NOAA is one of those agencies that really has to go out of its way to harm somebody because it is always trying to help somebody.

And so NASA, I say something very district-constituency related: You have never seen a crowd react to a congressman bringing someone to a school as when you bring an astronaut. I mean, that is absolutely incredible and we have to do more of that, continue to tie in the work of both agencies to the schools.

Because this excitement—I saw a group of kids just looking at weather maps and looking at maps taken on a trip to space and they were glued to that screen. You remember when you go and the teacher says, OK, you in the back, relax. It did not happen; they were glued to it. So, we should work on that.

So, thank you so much. Thank you for helping us through our first hearing. I wish I could say this was our last hearing of the season, but it is only our first. Thank you so much.

[CLERK'S NOTE: The Department did not respond with answers to submitted questions in time for inclusion in the record.]

The Honorable José E. Serrano
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
Understanding the Changing Climate System and the Role of Climate Research

1. The National Weather Service at NOAA does significant outreach as part of its Weather-Ready Nation initiative to protect human life and property from weather events. Given that the National Climate Assessment says that our adaptation efforts are nowhere near the scale necessary to avoid substantial damages to the U.S. economy and human health, shouldn't the federal government make similar outreach efforts to help reduce the long-term risks that communities face from climate change? Has NASA partnered with local communities to understand their needs for information and long-term decision support tools related to climate change adaptation comparable to the National Weather Service's Impact-Based Decisions Support Services?
2. How do NASA and NOAA coordinate with the rest of the federal government, and also with other partners including international partners?
3. How does our investment in NASA help NOAA, and vice versa? Are we duplicating effort unnecessarily on this important issue of the changing climate?
4. What were the recommendations in the most recent Earth Science Decadal Survey? How closely are NASA's near-term and long-term plans following these recommendations?
5. There are risks from potential sources of material coming into the atmosphere we may need to monitor for, and better understand, such as volcanic eruptions, air and space traffic in the stratosphere, climate intervention, and changes in the earth system itself. Please describe the atmospheric observations that NOAA and NASA currently carry out that are critical to measure these materials, what observations are at risk, and the need for an expansion to baseline critical dynamics like Earth's radiation budget and changes in stratospheric chemistry going forward?
6. Dr. Freilich, rising sea level is being blamed for coastal erosion, flooding, and a host of other problems. How do you know with certainty that sea level is rising, and do you know why it is changing?
7. Dr. Freilich, could you please contribute as well if you have examples of how you are providing useful climate-related information, based on your measurements, to technical and nontechnical decision makers?
8. Some communities are already making massive investments to protect themselves from climate impacts. New York City has a massive plan to build barriers to protect itself from another Superstorm Sandy. These types of investments are enormous and should be made with the best possible information about climate change, and the risks that it poses. For both of you, what are the most important investments to make in climate science and research so that we can reduce the uncertainty with regard to these risks?

9. Relatedly, what do each of you consider to be the greatest unknowns in climate modeling today, and what are your agencies doing to address these?

The Honorable Robert Aderholt
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
Understanding the Changing Climate System and the Role of Climate Research

NASA DEVELOPMENT OF SCIENCE MODELS

Thanks to cutting-edge technology and analyses, you say that NASA knows with certainty that the earth is changing.

1. Approximately how many separate variables do you observe across your earth science models?
2. Are there any variables you observe that tend to undermine the assessment that the earth is warming at an alarming rate?
3. What challenges must you overcome in order to accurately compare global temperatures from say, 1880, to 2019, considering the profound differences in climate data technology between the 19th century and today?

PREDICTING FUTURE CLIMATE CONDITIONS

I understand that once NASA collects all its various measurements, the quantitative knowledge you gain is then infused into numerical models which can then be used to predict future climate conditions.

4. Can you explain in further detail how the numerical models account for potential errors and inconsistencies in the data – such as human error, modifications in measurement practices over time, and changes in weather center locations from year to year?
5. Which present day conditions were your past models least successful in predicting?
6. Likewise, what past, but known, temperatures do your present models fail to match?
7. Is it common for NASA's analyses to differ from NOAA's; even though you rely on some of the same raw data?

NASA'S EARTH SCIENCE FLIGHT ELEMENT

NASA has 14 Earth science missions and major instruments in development for launch between April 2019 and September 2022.

8. Do you, with the help of your interagency and international partners, expect those missions to stay on track over the coming years? Does NASA currently have the resources necessary to ensure that work and those launches stay on track?
9. How will NASA's measurements and observations improve with the launches of those satellites and instruments? What needs will they address that are not currently provided by in-use satellites?

10. What is the total cost of these launches? I assume that since the U.S. taxpayer is paying for both the satellites and the launches that you are okay requiring that launch vehicles be American launch vehicles?

**PILOT PROGRAM - EARTH SCIENCE DATA FROM COMMERCIAL SMALL-SATELLITE
CONSTELLATIONS**

NASA has launched a pilot program to evaluate how small satellites launched by private industry could augment NASA's aging satellite fleet to form a more complete Earth science data set while saving costs.

11. When do you expect to complete the pilot evaluation?
12. Although the pilot evaluation is not yet complete, can you share some lessons learned thus far and what savings you expect to see?
13. Who is paying for this? Any investment by the private sector or by other countries?

SERVIR PROGRAM

The SERVIR Program was developed in 2004 by NASA researchers at Marshall Space Flight Center in Huntsville. The SERVIR Program, which is a joint venture between NASA and USAID, provides scientific expertise, computer applications, and technologies to developing nations to help researchers track environmental changes, evaluate ecological threats, and respond to natural disasters.

14. As NASA and USAID look to dedicate additional resources to expand the SERVIR program beyond the 30 countries it currently operates in, are there also benefits for the U.S.? Are there lessons being learned that we can be utilizing in the U.S. to better track environmental changes and respond to natural disasters?
15. Does the information that NASA gathers in helping these developing nations in turn help NASA gain a more comprehensive, global understanding of the world's changing climate? Are we creating long-term partnerships that can be leveraged to address the climate globally?

**The Honorable Matthew Cartwright
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record**

Understanding the Changing Climate System and the Role of Climate Research

1. Does the NCA represent our foremost experts' most accurate estimates of our climate future?
2. Recently, White House Press Secretary Sarah Sanders described the NCA as "the most extreme version and it's not based on facts." Is this description an accurate representation of the NCA which NASA signed off on?

3. The NCA is based on several climate scenarios. According to Chapter 1 of the NCA, the “current trends in annual greenhouse gas emissions, globally, are consistent with RCP8.5” which is the scenario with the highest emissions. All other scenarios assume a reduction in greenhouse gas emissions compared with recent trends. During the February 26, 2019 hearing, Dr. Jacobs of NOAA stated that the climate change scenarios in the NCA are based on “extremes.” Is Dr. Jacob’s statement an accurate representation of the climate scenarios used in the NCA?
4. The White House is exploring an *ad hoc* group to reassess previous federal agency reports on climate science and national security.¹ The group is championed by Dr. William Happer, who has said that carbon dioxide (CO₂) is not a “dangerous pollutant” but that “more CO₂ is actually a benefit to the earth.” Does NASA’s research back up Dr. Happer’s claim that more CO₂ in the atmosphere is a benefit to Earth?
5. Please describe any interactions NASA has had with the Administration regarding the scope and leadership of the *ad hoc* group. Did the White House ask NASA for input into its formation and will NASA’s climate science experts be part of it?
6. President Trump has indicated he does not agree with the scientific evidence that human activity is the cause of recent global warming. Given the Administration’s position on climate change, what steps has NASA taken to ensure that research grants are independently competed and that your climate scientists can do their work unhindered by political influence?
7. According to data provided by NASA, the last four years have been the four hottest ever recorded, with 2016 holding the record. States in every region of the nation have experienced unprecedented storms and calamitous extreme weather events. These events threaten the health of our economy and the health of our communities. New York, New Orleans, and Miami are already making extensive infrastructure investments to account for sea level rise and the frequency of dangerous storms. Chapter 11 of the NCA says that “Recent extreme weather events reveal the vulnerability of the built environment.” What is the range of infrastructure costs we may accrue due to the damage wrought by climate change over the next decade?
8. What tools and data is NASA providing to help local planners assess infrastructure vulnerabilities and investment needs?
9. The NCA states that “current infrastructure and building design standards do not take future climate trends into account.” Do we need to do more to help our standard setting organizations utilize forward looking climate data?
10. As indicated in the NCA, climate change impacts nearly every aspect of society. It will take a coordinated effort to confront this all-encompassing threat. Would you agree that the federal government needs to do more to confront extreme weather events with improved coordination and preparation?
11. Is there more that can be done at the federal level to help communities prepare for climate change, and what are some of the tools, research, and/or services the federal government can provide through improved interagency coordination?
12. Over the last two years, natural disasters are estimated to have cost the United States over \$466 billion. NASA’s satellites improve real time data on storm track, potentially saving

¹ https://www.washingtonpost.com/national/health-science/white-house-to-select-federal-scientists-to-reassess-government-climate-findings-sources-say/2019/02/24/49cd0a84-37dd-11e9-af5b-b51b7ff322e9_story.html?utm_term=.04f4d41f2b05

emergency planners millions on disaster preparedness. NASA's Climate Monitoring System provides information on how extreme weather events affect water quality in coastal areas, such as the Gulf of Mexico. Farmers rely on NASA's data to assess irrigation needs. Water resources planners use it to plan for water scarcity. And firefighters use it to assess the risk of wildfires. Would the cost of responding to the extreme weather events in 2017 and 2018 have been even higher without the data provided by NASA models and satellites?

13. Would you agree that these are valuable benefits to US communities that NASA should continue to provide?
14. One study estimates that the CLARREO mission will improve the accuracy of climate change measurements and allow for earlier and better informed decisions which will provide an economic benefit of over 10 trillions over the next 40 to 60 years.² Is this a good return on investment?
15. Last year President Trump and NASA proposed to cut Earth Science's budget by 7.1%. Would this cut have impaired our ability to prepare for and respond to natural disasters, such as those experienced over the last two years?
16. NASA's Climate Monitoring System was also zeroed out in the FY19 budget request. Would you agree that the climate monitoring program provides value to the American people well beyond its relatively modest price tag?
17. Given the conclusions of the NCA, is it important that we continue to fund the Climate Monitoring System and other similar Earth Science programs?

² https://clarreo.larc.nasa.gov/pdf/clarreo_talking_points_20160303_alr.pdf

The Honorable José E. Serrano
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
Understanding the Changing Climate System and the Role of Climate Research

1. During the Obama Administration, NOAA spent a serious amount of time and effort developing climate adaptation plans. What effort has been put into the implementation of those plans?
2. The National Weather Service at NOAA does significant outreach as part of its Weather-Ready Nation initiative to protect human life and property from weather events. Given that the National Climate Assessment says that our adaptation efforts are nowhere near the scale necessary to avoid substantial damages to the U.S. economy and human health, shouldn't NOAA make similar outreach efforts to help reduce the long-term risks that communities face from climate change? Has NOAA or NASA partnered with local communities to understand their needs for information and long-term decision support tools related to climate change adaptation comparable to the National Weather Service's Impact-Based Decisions Support Services?
3. How do NASA and NOAA coordinate with the rest of the federal government, and also with other partners including international partners?
4. How does our investment in NASA help NOAA, and vice versa? Are we duplicating effort unnecessarily on this important issue of the changing climate?
5. There are risks from potential sources of material coming into the atmosphere we may need to monitor for, and better understand, such as volcanic eruptions, air and space traffic in the stratosphere, climate intervention, and changes in the earth system itself. Please describe the atmospheric observations that NOAA and NASA currently carry out that are critical to measure these materials, what observations are at risk, and the need for an expansion to baseline critical dynamics like Earth's radiation budget and changes in stratospheric chemistry going forward?

The Honorable Robert Aderholt
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record
Understanding the Changing Climate System and the Role of Climate Research

GROUND-BASED VS. SATELLITE OBSERVATIONS

NOAA relies on an array of measurements from airborne and ground-based observations to detect climate trends and better understand our planet's processes.

1. Which do you consider to be the most reliable measurement to detect climate trends: ground-based or satellite observations? Do ground-based observations typically align with satellite observations?
2. What are some drawbacks of ground-based observations?
3. Are scientists able to subjectively decide which of the measurements should be rejected or utilized in NOAA climate analyses and models?

4. How does NOAA account for the fact that our latest models sometime fail tests against observations?

WILDFIRE SIZE AND FREQUENCY

Scientists attribute the recent increase in fire frequency and size in the western United States to, among other things, the rise of global temperatures.

5. What are some of the factors you have identified that help predict wildfire vulnerability?
6. How much data do you incorporate to take into account forest management practices which do not include enough efforts to prevent or slow fires?

The Honorable Matthew Cartwright Subcommittee on Commerce, Justice, Science, and Related Agencies Questions for the Record

Understanding the Changing Climate System and the Role of Climate Research

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2. Recently, White House Press Secretary Sarah Sanders described the NCA as "the most extreme version and it's not based on facts." Is this description an accurate representation of the NCA which NOAA signed off on?
3. The NCA is based on several climate scenarios. According to Chapter 1 of the NCA, the "current trends in annual greenhouse gas emissions, globally, are consistent with RCP8.5" which is the scenario with the highest emissions. All other scenarios assume a reduction in greenhouse gas emissions compared with recent trends. During the February 26, 2019 hearing, Dr. Jacobs of NOAA stated that the climate change scenarios in the NCA are based on "extremes." Please explain what would lead Dr. Jacobs to conclude that the NCA climate scenarios are extreme, a statement which appears to contradict the NCA which NOAA signed off on.
4. Has Dr. Jacobs ever met with anyone from the CO2 coalition or had conversations with anyone associated with this group about the plans for a climate working group?
 - a. *If YES:* Does NOAA believe they represent a reasonable view on climate change that is consistent with the NCA and the work of NOAA scientists?
 - b. *If No:* Does NOAA think they should be involved in the new climate working group?
5. Has the NCA undergone rigorous independent and adversarial scientific peer review?
6. What steps have NOAA taken to ensure that your climate scientists can do their work unhindered by political influence?
7. Given the devastating storms America has experienced this past year, it would seem astute to share actionable data on climate change's effects with federal, state, and local groups. As mentioned in Dr. Jacob's testimony, NOAA collects and analyzes vast amounts of actionable data. However, in December of 2018, the Associated Press reported that NOAA's current chief Administrator has never briefed President Trump on climate change. Under President Obama, the NOAA chief Jane Lubchenco briefed the president every few months. Who is the most senior official in the White House Dr. Jacobs has spoken to regarding climate change and how regular is this communication?

8. In 2014, the White House Office of Science & Technology Policy (OSTP), in partnership with an interagency working group that included NOAA, launched a new Climate Education and Literacy Initiative to help connect American students and citizens with the best-available, science-based information about climate change. How has NOAA continued this initiative and its goals under the current administration?
9. In 2014, under NOAA and NASA's leadership, the Obama Administration launched climate.data.gov — a climate-focused section of data.gov. [Climate.Data.Gov](https://climate.data.gov) featured datasets, web services, and tools to help communities prepare for extreme weather events. While other sections of [Data.Gov](https://data.gov) have continued to be updated, the climate section has not been updated since President Trump took office. Does NOAA plan on reviving [Climate.Data.Gov](https://climate.data.gov)?
10. Another critical resource which now appears nonoperational is the U.S. Climate Resilience Toolkit. This toolkit was specifically designed to assist people in finding and utilizing tools to build climate resilience. It was last updated in 2015. Does NOAA plan on reviving the U.S. Climate Resilience Toolkit?
11. States in every region of the nation have experienced unprecedented storms and calamitous extreme weather events. These events threaten the health of our economy and the health of our communities. New York, New Orleans, and Miami are already making extensive infrastructure investments to account for sea level rise and the frequency of dangerous storms. Chapter 11 of the NCA says that "Recent extreme weather events reveal the vulnerability of the built environment." What is the range of infrastructure costs we may accrue due to damage wrought by climate change over the next decade?
12. The NCA also states that "current infrastructure and building design standards do not take future climate trends into account." Do we need to do more to help our standard setting organizations utilize forward looking climate data?
13. Given what the NCA reports, would you agree that the federal government needs to confront extreme weather events with improved coordination and preparation? Is there more work that can be done at the federal level, and can we improve interagency coordination?
14. Sea Grant supports cutting-edge research focused on aquatic invasive species, harmful algal blooms, shoreline erosion, green stormwater infrastructure, flooding and hazard resilience, and the economic valuation of natural resources, among other things. The President's budget last year zeroed out funding for Sea Grant. Could you describe the unique extreme weather resilience information and projects that that Sea Grant provides?
15. How is NOAA planning on ensuring that these projects and data, which contribute to our assessment of natural resources, hazard resilience, and stormwater infrastructure continue to be implemented and collected?

Question: Cong. Kaptur asked NASA to provide the names of the missions mentioned in Dr. Michael Freilich's testimony ["NASA has 22 Earth-observing research satellite missions and major instruments on-orbit now, with 14 more in development for launch before FY 2023."] and to explain what each does:

Answer: the following tables contain the requested information:

NASA's 22 current Earth-observing research satellite missions and major instruments:

Landsat-7	1999	Landsat 7 gathers Earth surface and vegetation data, and is one of a long series of Landsat multispectral imaging satellites going back to 1972, supporting the longest continuous record of the global land surface as seen from space.
Terra	1999	Terra's five instruments simultaneously study clouds, water vapor, aerosol particles, trace gases, terrestrial and oceanic surface properties, biological productivity of the land and oceans, Earth's radiant energy balance, the interaction among them, and their effects on our changing climate.
Aqua	2002	Aqua's six instruments measure clouds, water vapor, aerosol particles, trace gases, biological productivity of the land and oceans, and Earth's radiant energy balance.
SORCE	2002	The Solar Irradiance and Climate Experiment (SORCE) provides state-of-the-art measurements of incoming x-ray, ultraviolet (UV), visible, near-infrared, and total solar radiation. These measurements help address long-term changes in our climate, natural variability and enhanced climate prediction, and atmospheric ozone and UV-B radiation, and continue the solar irradiance data record begun in 1980.
Aura	2004	Aura's four instruments study the chemistry and dynamics of Earth's atmosphere, with emphasis on the upper troposphere and lower stratosphere (0–30 km above the Earth's surface), and makes daily global observations of the ozone layer, air quality, and key environmental parameters.
CloudSat	2006	CloudSat provides a comprehensive characterization of the structure and composition of clouds and their effects on our environment under all-weather conditions using an advanced cloud profiling radar.
CALIPSO	2006	The Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observations (CALIPSO) mission combines an active lidar with passive infrared and visible imagers to study the role clouds and aerosols (airborne particles) play in weather, climate and air quality.
OSTM/Jason-2	2008	The Ocean Surface Topography Mission (OSTM)/Jason 2 mission uses a radar altimeter to measure sea-surface height to reveal the speed and direction of ocean currents and tell scientists how much of the Sun's energy is stored by the ocean. Jason-2 continues the series of precision global sea surface height measurements begun in 1992.
Suomi-NPP	2011	Suomi-NPP (National Polar-Orbiting Partnership) helped bridge the gap between NASA Earth Observing System missions (Aqua, Aura, and Terra) and the new series of National Oceanic and Atmospheric Administration's (NOAA)

		Joint Polar Satellite System (JPSS) satellites. Suomi-NPP carries five instruments and it helps address the challenge of acquiring a wide range of land, ocean, and atmospheric measurements for Earth system science while simultaneously preparing to address operational requirements for weather forecasting.
Landsat-8	2013	Landsat 8, the most recent in the series of Landsat satellites, provides moderate-resolution measurements of Earth's terrestrial and polar regions in the visible, near-infrared, short wave infrared, and thermal infrared wavelengths.
GPM	2014	The Global Precipitation Measurement (GPM) mission provides global precipitation observations every 2–4 hours. It serves as the “core” observatory carrying advanced active/passive microwave sensors to measure precipitation and serve as a calibration reference to unify estimates from an international constellation of research/operational satellites.
OCO-2	2014	The Orbiting Carbon Observatory-2 (OCO-2) collects measures atmospheric carbon dioxide (CO ₂) with the precision, resolution, and coverage needed to characterize sources and sinks on regional scales, as well as to quantify CO ₂ variability over seasonal cycles.
SMAP	2015	The Soil Moisture Active-Passive (SMAP) mission measures surface soil moisture and freeze-thaw state to improve our understanding of regional water cycles, ecosystem productivity, and processes that link the water, energy, and carbon cycles.
DSCOVR	2015	The Deep Space Climate Observatory (DSCOVR) is NOAA's principal space weather operational asset. It hosts two NASA Earth-facing instruments, the National Institute of Standards and Technology Advanced Radiometer (NISTAR), which measures Earth's radiation budget, and the Earth Polychromatic Imaging Camera (EPIC), which images Earth from the unique vantage point of the Earth-Sun Lagrange-1 point.
CYGNSS	2016	The Cyclone Global Navigation Satellite System (CYGNSS) is a constellation of eight microsatellites that receives signals from the Global Positioning System (GPS) to derive ocean surface wind speed and study the relationship among ocean surface properties, moist atmospheric thermodynamics, radiation, and convective dynamics to determine how a tropical cyclone forms and strengthens. CYGNSS is an Earth Venture Mission.
SAGE-III/ISS	2017	The Stratospheric Aerosol and Gas Experiment III (SAGE-III) instrument, onboard the International Space Station (ISS), provides global, long-term measurements of key components of Earth's atmosphere, measuring the vertical distribution of aerosols and Earth's ozone layer from the upper troposphere through the stratosphere (roughly 8-50km above the Earth's surface).
LIS/ISS	2017	The Lightning Imaging Sensor (LIS) is an instrument used to detect the distribution and variability of total lightning (cloud-to-cloud, intra-cloud, and cloud-to-ground lightning) and measures the amount, rate, and radiant energy of lightning on a nearly global basis. Mounted on the ISS, this LIS instrument was built in 1990s as a spare to one that operated onboard the Tropical Rainfall Measurement Mission (TRMM) for over 17 years.

TSIS/ISS	2017	The Total and Spectral Solar Irradiance Sensor-1 (TSIS-1) instruments continue NASA's continuous dataset of precise measurements of solar irradiance begun in 1980, which are critical for accurate scientific models of climate change and solar variability. TSIS-1 is a dual-instrument package to acquire solar irradiance measurements from ISS over five years.
GRACE-FO	2017	The Gravity Recovery and Climate Experiment Follow-On (GRACE-FO) continues the data record from GRACE by accurately mapping minute variations in Earth's gravity field. These data are used to understand the distribution of fresh water in the planet's land masses, including insight into the water storage levels of large underground aquifers.
ECOSTRESS/ISS	2018	The ECOsystem Spaceborne Thermal Radiometer Experiment on Space Station (ECOSTRESS) mission provides high-resolution thermal infrared measurements of Earth's surface from the ISS. These measurements quantify water stress in plants and suggest how selected ecosystems will respond to future changes in our environment. ECOSTRESS is an Earth Venture Instrument selection.
ICESat-2	2018	The Ice, Cloud, and land Elevation Satellite-2 (ICESat-2) uses a precision lidar instrument to measure ice properties, global vegetation canopy, and polar stratospheric clouds. The mission continues the assessment of polar ice changes by providing multi-year elevation data needed to determine ice sheet mass balance and cloud properties.
GEDl	2018	The Global Ecosystem Dynamics Investigation (GEDl) mission provides the first comprehensive observations of vegetation canopy height and structure, using a multi-beam waveform lidar instrument on the ISS. These data will be used to assess how much carbon is stored in tropical and temperate forests and the impact of disturbance on atmospheric CO2 concentrations and biodiversity resources.

NASA's 14 Earth-observing research satellite missions and major instruments in development for launch before 2023:

Mission Acronym	Expected Launch Date	Description
OCO-3	May 2019	The Orbiting Carbon Observatory 3 (OCO-3) instrument will collect measurements of atmospheric carbon dioxide with the precision, resolution, and coverage needed to assess within-year variability. It will acquire data from the ground directly below, in high glint areas (e.g., ocean), and on target areas for continuous measurements. Built using a spare OCO-2 flight instrument and additional elements, it will be installed on the ISS.
TROPICS	Sept 2020	Twelve CubeSats in three low-Earth orbital planes, the Time-Resolved Observations of Precipitation structure and storm Intensity with a Constellation of Smallsats (TROPICS) will provide rapid-refresh microwave measurement over the tropics to observe the thermodynamics and precipitation structure of tropical cyclones over much of the systems' lifecycles. The measurements will provide nearly all-weather observation, including 3D temperature and humidity, as well as cloud ice and precipitation horizontal structure. These are needed to better understand tropical cyclone lifecycle and cyclone intensification. TROPICS is an Earth Venture Instrument selection.
Sentinel 6A/B	Nov 2020; 2025	Sentinel-6A/B will provide ocean topography-data continuity (following TOPEX/Poseidon and Jason-1, -2, and -3) of sea surface height, ocean circulation, and sea level measurements essential for operational oceanography monitoring. Vertical profiles using Global Positioning System radio occultation sounding will measure tropospheric/stratospheric temperature changes and support numerical weather prediction. Sentinel-6 satellites are part of the European Earth observation program Copernicus; NASA will contribute select science instruments and launch vehicles.
Landsat 9	Dec 2020	Landsat 9 will extend the sustained land imaging program's record of mid-resolution land images of Earth to over half a century. An upgraded rebuild of Landsat 8, the spacecraft will carry two instruments that capture views of the planet in visible/near-infrared (IR)/shortwave IR light and measure the thermal IR radiation, or heat, of Earth's surfaces. The mission is also funding a study team that is exploring new architectures for future sustained land imaging missions.
MAIA	Mar 2021	MAIA (Multi-Angle Imager for Aerosols) is a twin-camera instrument that will make radiometric and polarimetric measurements needed to characterize the size, composition, and quantity of particulate matter in air pollution. MAIA is an Earth Venture Instrument selection.
SWOT	Sept 2021	SWOT (Surface Water Ocean Topography) will be the first wide-swath altimetry mission measuring sea surface height and terrestrial water height for at least 90 percent of the globe using a dual-antenna Ka-band Radar Interferometer. It will contribute to a better understanding of the

world's oceans and terrestrial surface waters by making high-resolution measurements of ocean circulation.

NISAR	Nov 2021	The NASA-ISRO (India Space Research Organization) Synthetic Aperture Radar (NISAR) mission will be the first NASA mission to systematically and globally acquire radar images of surface changes resulting from ice sheet collapse, earthquakes, tsunamis, volcanoes, and landslides, and produce images both detailed enough to detect local changes and broad enough to measure regional trends.
OMPS-Limb	Mar 2022 (Instrument delivered Mar 2018)	The advanced Ozone Mapping and Profiler Suite (OMPS) instruments track ozone layer health and measure ozone concentration in Earth's atmosphere. OMPS Limb (L) and Nadir (N) sensors are currently on the Suomi NPP spacecraft. The OMPS-N sensor will be on the NOAA/NASA JPSS-1 mission, and OMPS-L is a NASA-provided sensor for the NOAA/NASA JPSS-2 mission.
GeoCARB	Jun 2022	GeoCARB (Geostationary Carbon Cycle Observatory) seeks to revolutionize terrestrial carbon cycle science through daily wall-to-wall mapping of trace gases and photosynthesis. GeoCARB will help improve understanding of why the global carbon cycle is changing, how greenhouse gas emissions vary with population, and how variations in the biosphere affect the natural uptake and emissions of CO ₂ and methane (CH ₄). GeoCARB is an Earth Venture Mission selection.
CLARREO-PF	Nov 2022	The Climate Absolute Radiance and Refractivity Observatory Pathfinder (CLARREO-PF) will demonstrate measurement technologies, such as thermal IR radiation and reflected solar radiation at high absolute accuracy, required for the full CLARREO mission. CLARREO aims to produce highly accurate climate records to test climate projections in order to improve models and enable sound policy decisions.
PACE	2022 TBD	PACE (Plankton, Aerosol, Cloud, and ocean Ecosystem) will utilize a hyperspectral scanner to make global ocean color measurements essential for understanding the carbon cycle and how it both affects and is affected by climate change, along with aerosol polarimetry measurements to extend data records on clouds and aerosols. PACE will expand ongoing global observations of ocean ecology, biology, and chemistry required to quantify aquatic carbon storage and ecosystem function in response to human activities and natural events.
TEMPO	TBD (seeking launch host; Instrument delivered Dec 2018)	The Tropospheric Emissions: Monitoring of Pollution (TEMPO) mission will measure pollution in North America hourly and at high spatial resolution to improve prediction of air quality and the amount of energy Earth receives from the Sun and the planet radiates back to space. TEMPO is an Earth Venture Instrument selection.
PREFIRE	TBD	PREFIRE (Polar Radiant Energy in the Far Infrared Experiment) will fly a pair of CubeSat satellites to probe a little-studied portion of the radiant energy emitted by Earth for clues about Arctic warming, sea ice loss, and ice-sheet melting. PREFIRE is an Earth Venture Instrument selection.

EMIT

TBD

EMIT (Earth surface Mineral dust source Investigation) will determine the mineral composition of natural sources that produce dust aerosols around the world from the ISS. By measuring in detail which minerals make up the dust, EMIT will help to answer whether this type of aerosol warms or cools the atmosphere. EMIT is an Earth Venture Instrument selection.

THURSDAY, MARCH 7, 2019.

EXECUTIVE OFFICE FOR IMMIGRATION REVIEW

WITNESS

JAMES MCHENRY, DIRECTOR, EXECUTIVE OFFICE FOR IMMIGRATION REVIEW

Mr. SERRANO. The subcommittee will come to order. Good morning to all.

For our second hearing of the year today, we welcome James McHenry, the Director of the Executive Office for Immigration Review, or EOIR. EOIR primarily functions as our Nation's immigration court system, where it administers and adjudicates our Nation's immigration laws. And we thank you for being with us, Director McHenry.

I wanted to hold this hearing because I have deep concerns about how our Nation's immigration courts are operating. Some of those concerns are long standing, while others have been exacerbated by the decisions of the Administration.

Our Nation's immigration courts handle a wide variety of immigration-related claims, from removal proceedings to asylum claims; these are complex, nuanced proceedings that require time, understanding, and care. In many cases, the consequence of removal from this country is so severe that we must have significant due process to ensure that no one's rights are violated in an immigration court proceeding.

Unfortunately, these concerns are increasingly being shoved aside. This in part is due to an enormous and growing backlog of pending cases before the courts, which is now more than one million cases. According to the Transactional Records Access Clearinghouse at Syracuse University, the growth is largely due to the significant increase in immigration enforcement efforts over the past 15 years, which has not been followed by a similar growth in the immigration court system.

Although this subcommittee has included significant increases in immigration judge teams for the past two fiscal years, your backlog has actually increased under the Trump administration. This situation was worsened by the recent government shutdown. The reasons for that are sadly clear: the leadership of the Justice Department has attempted to turn our immigration courts into a sort of deportation DMV where immigrants get minimal due process on their way out the door.

This Administration has chosen to impose quotas on immigration judges to limit case consideration regardless of complexity; limit the ways in which immigrants can make valid claims for asylum; increase the use of video conferencing to reduce in-person appearances; and undermine the discretion of immigration courts to ad-

ministratively close cases, among many other things. Ironically, those choices, supposedly aimed at efficiency, have actually increased the backlog.

I believe our immigration courts should strive to be a model of due process. A couple of bright spots in that effort are the Legal Orientation Program and the Immigration Court Help Desk, both of which help to better inform immigrants about their court proceedings; we should seek to expand such programs.

Despite these efforts in our current system, an estimated 63 percent of immigrants do not have legal counsel. We have all read stories about children, some as young as 3 years old, being made to represent themselves. That is appalling. Our immigration laws are complicated enough to native-English speakers, let alone those who come here speaking other languages or who are not adults. We can and should do better than this.

Today's hearing will explore the choices we are making in our immigration court system to better understand how the money we appropriate is being used, and whether it is being used in line with our expectations and values.

We thank you again, Director McHenry, for being here today.

And I would like to turn to my friend Mr. Aderholt for his statement.

Mr. ADERHOLT. Thank you, Mr. Chairman, for yielding. And I am pleased today to be here, so we can conduct this critical oversight of the Executive Office for Immigration Review, and hear more about the future of our immigration court system.

In recent years, this subcommittee has been very concerned with the conditions at EOIR. I understand there have been significant efforts underway at EOIR to accelerate the hiring process, improve completion time lines, and allocate resources for those areas with the highest workload, such as the Southwest border region.

The adjudication and the appeals of immigration matters are central to the proper administration of justice in this country. Congress must ensure that U.S. immigration laws are interpreted as Congress intended, and administered fairly and efficiently; therefore, it is incumbent upon EOIR to operate in a way that maximizes docket management and minimizes fraud and delay.

I would say it is probably understatement to say that EOIR's 840,000 case backlog is a matter of concern. Through this important hearing this morning, I hope to distinguish between the extent to which this backlog is attributable to factors beyond EOIR's control, and the degree which EOIR's resources, administration, and performance contribute to the caseload challenges.

The bottom line is the net effect of this untenable backlog situation is to delay justice, in many cases for years, for those who have a valid claim to immigration benefits, while those who have no right to remain in the United States are rewarded with many years of continued illegal presence.

Unfortunately, disappointing new information EOIR shared with this subcommittee this week projects resource shortfalls that will result in lower-than-anticipated hirings, delays in the rollout of EOIR's electronic courts and appeals system, and the impact of the implementation of EOIR's court-staffing model.

As I say, I hope this morning from this subcommittee hearing that we can get a full understanding of how the recently enacted fiscal year 2019 appropriations for EOIR could be so misaligned with EOIR's fiscal year 2019 resource needs. How could EOIR have better advised this subcommittee in the months leading up to the consideration of our fiscal year 2019 legislation.

I want to thank the chairman for holding this important and very timely hearing, and I welcome Director McHenry to the subcommittee today and we are pleased to have you before us this morning. I look forward to hearing your testimony and discussing the important work of EOIR.

And I yield back.

Mr. SERRANO. Thank you, Mr. Aderholt.

Director McHenry, you are now recognized for your opening statement. We wish you could keep it to 5 minutes, although please understand that your full statement will be put on the record.

Mr. MCHENRY. Thank you.

Mr. Chairman, Ranking Member Aderholt, and other distinguished members of the subcommittee, thank you for the opportunity to speak with you today. As the Director of the Executive Office for Immigration Review at the Department of Justice, I welcome this opportunity to share with you the progress that EOIR has made and to discuss the challenges it faces in the near future.

The primary mission of EOIR is to adjudicate immigration cases by fairly, expeditiously, and uniformly interpreting and administering the Nation's immigration laws. This mission is carried out every day with professionalism and diligence by EOIR's 1800 employees across seven components. I am honored to lead EOIR's employees, for they are firmly committed to this mission, and have performed commendably as we have sought to strengthen and improve the functioning of our adjudicatory system.

We are grateful for the support of Congress, the Administration, and the Department in undertaking this effort and, with continued support, we expect to be able to build on these successes in the years to come.

EOIR has made considerable progress in the past 21 months in restoring its reputation as a fully functioning, efficient, and impartial administrative court system, capable of rendering timely decisions consistent with due process. To be sure, EOIR continues to face a significant backlog of pending cases at the immigration court level, one that nearly tripled between 2009 and 2017. During that time, decreased productivity, protracted hiring times for new immigration judges, and the lack of any progress in moving toward an electronic filing system all hindered EOIR's ability to effectively carry out its mission. Beginning in 2017, however, EOIR has aggressively confronted these challenges.

EOIR has hired more immigration judges in the past 2-plus fiscal years than it hired in the 7 prior fiscal years combined. Further, after 8 consecutive years of declining or stagnant productivity, EOIR is now in the middle of its third consecutive year of increased case completions and at the end of the first quarter of fiscal year 2019 it was on pace for the third-highest completion rate in its 36-year history. These results are a testament to the professionalism and dedication of our immigration judge corps, and a direct refuta-

tion of critics who intimate that immigration judges lack the integrity or competence to resolve cases in both a timely and impartial manner.

EOIR is also striving to modernize and digitize its critical information systems, as the benefits of an electronic filing and case management are undisputed.

In 2018, EOIR piloted its new electronic filing system called ECAS at five immigration courts and the Board of Immigration Appeals. The results have been encouraging, as nearly 8,000 attorneys have registered to use ECAS so far. EOIR expects to initiate the nationwide rollout of ECAS later this year.

Each of these accomplishments is critical to EOIR's continued to success as it addresses the pending caseload. Nevertheless, several challenges remain to ensure that these successes are not undermined or wholly eroded, and further challenges may also be on the horizon.

Overall, fiscal year 2019 represents a transitional year for EOIR; it has solved some of its most persistent problems of the past decade, but now it must also ensure that its recent improvements do not become ephemeral.

For many years, the immigration court caseload increased due to factors primarily within EOIR's control, mainly declining productivity, insufficient hiring, and a lack of an institutional emphasis on the importance of completing cases in a timely manner; those factors are now being successfully addressed. More recent increases to the caseload, however, have been driven largely by external factors, including increased numbers of asylum claims in immigration proceedings and increased law enforcement efforts by the Department of Homeland Security. It remains critical for EOIR to leverage available resources to ensure this increased caseload is addressed in a fair and efficient manner.

EOIR remains committed to reducing the pending caseload and to fully reestablishing itself as the preeminent administrative adjudicatory body in the United States. With the leadership and support of the Department and the Administration, as well as ongoing congressional support, I am confident that EOIR will succeed in meeting these goals.

Again, thank you for this opportunity to speak before you today, and I look forward to further discussions on these issues and am pleased to answer any questions you may have.

[The information follows:]



STATEMENT OF

JAMES MCHENRY
DIRECTOR
EXECUTIVE OFFICE FOR IMMIGRATION REVIEW
UNITED STATES DEPARTMENT OF JUSTICE

BEFORE THE

COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND
RELATED AGENCIES
UNITED STATES HOUSE OF REPRESENTATIVES

FOR A HEARING ENTITLED

"EXECUTIVE OFFICE FOR IMMIGRATION REVIEW"

PRESENTED ON

MARCH 7, 2019

Statement of**James McHenry
Director****Executive Office for Immigration Review
Department of Justice****Before the
House Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies****March 7, 2019**

Mr. Chairman, Congressman Aderholt, and other distinguished Members of the Subcommittee, thank you for the opportunity to speak with you today. As the Director of the Executive Office for Immigration Review ("EOIR") at the Department of Justice ("Department"), I welcome this opportunity to share with you the progress that EOIR has made and to discuss the challenges it faces in the near future.

The primary mission of EOIR is to adjudicate immigration cases by fairly, expeditiously, and uniformly interpreting and administering the Nation's immigration laws. This mission is carried out every day with professionalism and diligence by EOIR's approximately 1800 employees across seven components, including 65 immigration courts and adjudication centers, the Board of Immigration Appeals, and the Office of the Chief Administrative Hearing Officer. I am honored to lead EOIR's employees, for they are firmly committed to this mission and have performed commendably as we have sought to strengthen and improve the functioning of our adjudicatory systems. We are grateful for the support of Congress, the Administration, and the Department of Justice in undertaking those efforts, and with continued support, we expect to be able to build on these successes in the years to come.

EOIR has made considerable progress in the past twenty-one months in restoring its reputation as a fully-functioning, efficient, and impartial administrative court system capable of rendering timely decisions consistent with due process. To be sure, EOIR continues to face a significant backlog of pending cases at the immigration court level, one that nearly tripled between Fiscal Year ("FY") 2009 and FY 2017. During that time, decreased productivity, protracted hiring times for new immigration judges, and the lack of any progress in moving toward an electronic filing systems all hindered EOIR's ability to effectively carry out its mission. Beginning in 2017, however, EOIR has aggressively confronted these challenges.

After eight consecutive years of declining or stagnant productivity between FY 2009 and FY 2016, EOIR is now in the middle of its third consecutive year of increased immigration court case completions. In FY 2018, immigration judges completed more cases than in any year since FY 2011, and at the end of the first quarter of FY 2019, EOIR was on pace to complete more cases than at any time since FY 2006. These results are a testament to the professionalism and dedication of our immigration judge corps and a direct refutation of critics who intimate that immigration judges lack the integrity or competence to resolve cases in both a timely and impartial manner as required by law.

EOIR has reduced the time it takes to hire a new immigration judge from an average of 742 days to as little as 195 days, a reduction of 74 percent. As a result, EOIR has hired more immigration judges since January 20, 2017, than it hired in the seven prior fiscal years combined. As of March 5, 2019, EOIR has 427 immigration judges on board with one additional class of new judges expected in April.

EOIR is also striving to modernize and digitize its critical information systems. The benefits of an electronic filing and case management system are undisputed. A fully electronic system will improve case scheduling and adjudication efficiency, reduce time spent on administrative tasks related to paper files, and free additional space to be used for additional staff or court expansion. EOIR's Office of Information Technology ("OIT") has worked tirelessly in the past year to finally make such a system a reality for EOIR after 16 years of little to no progress. In 2018, EOIR piloted its new electronic filing system, EOIR Courts and Appeals System ("ECAS"), at five immigration courts and the Board of Immigration Appeals with encouraging results, as nearly 8000 attorneys have registered to use ECAS so far. EOIR expects to initiate the nationwide rollout of ECAS in FY 2020.

Each of these accomplishments is critical to EOIR's continued success as it addresses the pending caseload. Nevertheless, several challenges remain which require sustained support to ensure that these successes are not undermined or wholly eroded, including challenges related to space acquisition, hiring attorneys, interpreters, transcription, data analytics, Freedom of Information Act (FOIA) requests, and training. Further challenges may also be on the horizon depending on the results of pending litigation.

Overall, FY 2019 represents a transitional year for EOIR. It has solved some of its most persistent problems of the past decade, but now it must also ensure that its recent improvements do not become ephemeral. For many years, the immigration court caseload increased due to factors primarily within EOIR's control, namely declining productivity by immigration judges, insufficient hiring, and a lack of institutional emphasis on the importance of completing cases in a timely manner. Those factors are now being successfully addressed. More recent increases to the caseload, however, have been driven largely by external factors, including increased numbers of asylum claims in immigration proceedings and increased law enforcement efforts by the Department of Homeland Security. It remains critical for EOIR to leverage available resources to ensure this increased caseload is addressed in a fair and efficient manner.

The nature and timing of the FY 2019 budget process has left EOIR short of fulfilling all of its current operational needs, and it is limited in its ability to reform programs that are not cost effective. Consequently, some of its progress—particularly in moving toward a goal of 700 immigration judges and the nationwide deployment of ECAS—will likely be slowed until the completion of the FY 2020 appropriation process or beyond. Nevertheless, EOIR remains committed to reducing the pending caseload and to fully re-establishing the agency as the home of the preeminent administrative adjudicatory bodies in the United States. With the leadership and support of the Department and the Administration, as well as ongoing congressional support, I am confident that EOIR will succeed in meeting those goals.

Again, thank you for this opportunity to speak before you today. I look forward to further discussions on these issues, and I am pleased to answer any questions you may have.

Mr. SERRANO. Thank you.

Yesterday, the same day you submitted a rather glowing statement to this subcommittee, you sent an email out to EOIR staff stating that due to the increase in cost of interpreters you are potentially going to slow down the hiring of judges, cancel training, curtail acquisition of new space, and delay information technology improvements.

I understand that cost increase, but what I find unacceptable is that you didn't come to the Congress, to this subcommittee, and openly discuss this budget situation and ask for additional resources. I assume these cost increases have been going on for months prior to the enactment of the final CJS bill. At the same time, this Administration was asking for and holding a large part of the Federal Government hostage over funding for an unnecessary wall.

So my first two questions for you are, when did you become aware of the shortfall in the budget, and why didn't you request more funding for the interpreters' contracts?

INTERPRETER CONTRACTS

Mr. MCHENRY. To answer the first question, interpretation has been a challenge for EOIR throughout its history, and it sort of ebbed and flowed over the years. In the early 2000s, we had difficulty obtaining interpreters and at that point had to switch to telephonic interpreters on a relatively frequent basis. Again, over the years, over the time, you know, the challenge has come, gone, and come back again.

Right now, the challenge, however, is driven primarily by our successes. As I alluded to, we have hired more judges, we are completing more cases, we are holding more hearings. The number of hearings for non-English speakers have risen by almost 60 percent in the past 5 years. These of course increase interpreter costs, because we are completing more cases and holding more hearings.

Mr. SERRANO. But you are saying that it is not possible to have a hold on finding out how many interpreters you will need or you are always short when you are reaching out?

How many languages do you deal with?

Mr. MCHENRY. Our interpreter contract I think calls for at least 350 different languages. And we have attempted to address the interpreter situation in other ways. For example, last year we advertised for full-time interpreters to hire at the courts. Unfortunately, to be a full-time interpreter at EOIR, as outlined in our language access plan, requires a great deal of experience, particularly in a judicial setting. So when we tested the interpreters, unfortunately, we only got a handful who were able to successfully complete the examination.

We have also been looking at stacking and docketing practices to ensure that languages are grouped together, so that we are not wasting the interpreter resources.

Mr. SERRANO. Now, the memo you sent out putting forth this bad news to the staff, does that have a starting date, an implementation date?

Mr. MCHENRY. As you know, the budget was——

Mr. SERRANO. Yeah, I don't want to be in a situation here where I am telling you, if you talk to us, we are going to take care of the problem. That is not the way we work at Appropriations. We have to find out where the money is going to come from and so on. But I think, at the minimum, from what I heard Mr. Aderholt say and what I have said, we would have been open to discuss the situation and find out going forward how can we be helpful, either in some special situation that comes up in Congress or in the next year's budget.

EXECUTIVE OFFICE FOR IMMIGRATION REVIEW (EOIR) RESOURCE CONSTRAINTS

So I am just not understanding how there wasn't an alarm that this was going to be a problem and then an email comes out saying we have a problem that we, Congress didn't know about.

Mr. MCHENRY. No, I am happy to take that message back to the Department. I think the Department is pleased to hear that. This committee has been extremely supportive of EOIR in the past, especially in the recent past, and none of the success, none of the things that I alluded to with hiring, with case completions, all of our efforts are almost entirely attributable to that support. So we are very grateful, very appreciative, and I will definitely relay that message.

Mr. SERRANO. Thank you.

IMMIGRATION JUDGE (IJ) PERFORMANCE MEASURES

Last year, then-Attorney General Sessions testified that immigration judges, quote-unquote, "agreed to use case-completion goals as part of their job performance evaluations." Is this true, did immigration judges agree to the use of case-completion goals as part of their job performance evaluations?

I always preface a lot of these comments by saying I am not a lawyer; I am not a judge. I played one on "Law & Order" once, but that doesn't count. But it would seem to me that democracy and justice should take whatever time it takes. You know, I am one of those few people that says, you know, gridlock may not be a terrible thing, because there are places where the budget is always on time because one person decides what the budget is going to look like, whatever group. We have a democracy and democracy means you get elected, I get elected, we disagree, and it may take a little longer to reach that situation.

But the whole idea that, you know, you must complete so many cases or else you are not doing a good job just doesn't make sense to me. Was there agreement on the part of the judges and everyone else at EOIR to do this?

Mr. MCHENRY. I can't necessarily speak to what Attorney General Sessions may have said, because I am not familiar with the full context, but what I can say is that prior to last year the collective bargaining agreement that we have with the immigration judge union prohibited the use of numeric performance measures. We negotiated that with the union and, as part of that negotiation, that section was withdrawn. That then allowed us to promulgate these performance measures at the beginning of this current fiscal year.

To our mind, we understand the concerns and we have looked at them very closely, but we don't consider them quotas, and we don't consider them quite as black and white or quite as stark as perhaps they have been portrayed.

In the collective bargaining agreement there are six discrete factors that we do consider, plus a seventh catchall to sort of account for any situations, any anomalies, any weird trends that may be impacting a judge's performance.

Mr. SERRANO. Well, but that brings us to the next part, which is how can you ensure that judges don't feel pressured to take shortcuts within the system in order to meet what is being asked of them?

Mr. MCHENRY. To our mind, again, we are sensitive to that concern, but to us it is sort of a false dichotomy. The regulations require that the judges issue decisions in both a timely and impartial manner; we don't see the two as in tension, being able to do things timely and impartially. And these performance measures, they are also not unique to us. There are a number of other agencies that have implemented our other components. The Board of Immigration Appeals and the Office of the Chief Administrative Hearing Officer, they also have performance measures or case-completion goals.

And we won't have the results, we won't have the outcomes, obviously, until the end of the fiscal year, but so far we haven't noticed any significant issues that have come up with them so far.

Mr. SERRANO. Well, let me just say on the record for you to take back also, based on what you said before, that we want judges to be judges; we want them to judge, we don't want them to have to meet a quota or meet a time line in order to deal with justice. Justice doesn't work that way. If it takes longer, let it take longer, or let's talk about more judges rather than a number that doesn't fit.

And lastly on this, do you anticipate that the use of these performance goals could be used as grounds for an appeal of an immigration case?

Mr. MCHENRY. Again, that is an issue that has been raised and that we have looked at, but by itself we wouldn't expect so. First, because our judges are professional, they know that the law says that they don't make decisions based solely or entirely on those goals, they know that that will lead to reversal.

Additionally, we can't control what arguments people want to raise, but we have trained our judges, they understand—many of them come from other systems that have performance measures or case-completion goals, and they understand, as I alluded to, how to balance being fair and impartial and respecting due process, and also providing timely adjudications of the cases, so that these individuals don't have to wait any longer than is absolutely necessary to get a decision.

Mr. SERRANO. I want to ask one last question here and then get on to the other members and Mr. Aderholt.

EOIR'S CASE BACKLOG AND EFFECT OF GOVERNMENT SHUTDOWN

We just had the longest government shutdown in history; what has this done in terms of the backlog of immigration cases? Can you tell us the current backlog number, as well as how many cases

have been added to the backlog as a result of the shutdown? How long will it take to get back to the pre-shutdown level?

Mr. MCHENRY. The current pending caseload is about 850,000. We wouldn't necessarily say those are all backlog, because that includes cases that were filed yesterday, the day before, a few weeks ago that haven't been pending for that long. It also includes detained cases, which generally move much more expeditiously.

In terms of the shutdown, for us it is not a question of added cases, because non-detained cases weren't being adjudicated, they weren't being filed, so it is hard to say. What we can say is that we had to cancel approximately 60,000 hearings during the time of the shutdown.

RESCHEDULING OF CANCELED HEARINGS

Mr. SERRANO. And when you canceled them, were you able to get back to those folks after the shutdown and tell them that you were ready to hear their cases or that they were still on schedule to have their cases heard?

Mr. MCHENRY. The courts are in the process of rescheduling those. They have been working overtime since the shutdown ended to get that done.

Mr. SERRANO. Because from what we understand on the committee during the shutdown, many may not have been sent written notice after the shutdown that the cancellation now is over and they can be taken care of, or at least dealt with their issue.

Mr. MCHENRY. There was a hiccup the first week after the shutdown ended, because we didn't have time to necessarily get notices out. We also had a couple of courts closed that week due to weather issues that delayed it, but we think those problems have largely been resolved since then.

Mr. SERRANO. Thank you.

Mr. Aderholt.

EOIR'S CASE BACKLOG SOLUTIONS

Mr. ADERHOLT. Well, talking about the backlog, you said 850,000, I believe we talked about 840, 850,000 pending cases, and you talked a little bit about in your opening remarks about the hurdles, but can you again talk about what you think are the greatest hurdles to overcoming that backlog and in trying to reduce it? I mean, if you had to really focus on just one or two things, what do you think are the greatest need there to try to overcome that?

Mr. MCHENRY. The number-one need, as it has been, as the President has outlined, as this committee is aware, the subcommittee is aware, is more immigration judges, increased immigration judges.

In October of 2017, the Administration called for adding 370 immigration judges. At the time, we had about 330, so that equates to about 700 total. We know that, when we get more judges, they are adjudicating more cases more effectively, more efficiently, the numbers keep going.

EOIR'S 2014 RE-ALLOCATION OF RESOURCES

Mr. ADERHOLT. To what extent do you believe that the reallocation of resources and judges to the priority dockets of unaccompanied minors and family units beginning in 2014 contributed to the backlog?

Mr. MCHENRY. It is a frequent criticism and it is clear that the reshuffling of the dockets didn't help the backlog, but it is part of a larger sort of culture at the time that, as I alluded to, didn't emphasize the importance or the need for completing cases in a timely manner. So it sort of plays into the larger issue of, you know, an institutional focus on the need to get the cases completed and to get results for the individuals in proceedings.

CASE PRIORITIES

Mr. ADERHOLT. Does EOIR make these cases a priority?

Mr. MCHENRY. In January of 2018, we issued a new priorities memo. Under the prior memo, fewer than 10 percent of our cases were prioritized, but our new memo says detained cases are obviously a priority, and any other case that is subject to a deadline set by statute, by regulation, by court order, or by policy is a priority. Essentially, the cases in which we have to wait for another agency to act, those don't necessarily fall within the priority distinction, but all of the other cases do.

INTERPRETER NEEDS/CHALLENGES

Mr. ADERHOLT. And you mentioned additional challenges that will need to be sustained to support—to ensure that EOIR's recent successes are not undermined or eroded. And you—as mentioned earlier, you said it was—correct me, you said in early 2000 was when the interpreter issue became a real challenge?

Mr. MCHENRY. It has been a challenge off and on at least since then. We issued policy guidance, I believe in 2004, to address it at the time.

Mr. ADERHOLT. But that is when it first became real was the early 2000s.

Mr. MCHENRY. Right, but it hasn't necessarily been consistent over that time.

Mr. ADERHOLT. Right, but that is when you first saw it, even though it has waned back and forth since that time?

Mr. MCHENRY. I am not necessarily familiar with the agency history before that time, but that is the first time that I am aware of.

Mr. ADERHOLT. How does the on-boarding of additional judges drive your interpreter needs and how we will address this challenge in future budget submissions?

Mr. MCHENRY. Well, the fiscal year 2020 budget hasn't been put out yet, I believe it is scheduled to be put out next week or in the next couple of weeks, so I defer to the Department and to OMB for the formal submission. But, as I alluded to and as our statistics show, the increase in the number of judges, you know, we hire them to hear cases, they are hearing more cases, they are hearing them more efficiently, we have had an increase in the number of hearings that require—or for non-English speakers, which ordi-

narily require interpreters. So, the more judges you have, the more hearings you hold, the more need there is going to be for interpreters.

EOIR'S COURTS AND APPEALS SYSTEM (ECAS) PILOT PROGRAM

Mr. ADERHOLT. In 2018, EOIR launched an electronic filing pilot program marking the first phase of EOIR's Courts and Appeals System, ECAS, initiative. Can you take a minute and just describe that pilot program and the outcomes that you observed from your viewpoint?

Mr. MCHENRY. Sure. ECAS is our electronic filing program. We are one of the few, maybe the only at this point, administrative agency that is still using a paper filing protocol. We have known it is a concern, we have known it is an issue for many, many years. And in 2018, with the subcommittee's support, we were able to take some of the first steps toward piloting what you call ECAS to rectify that situation. We are also grateful the fiscal year 2019 enactment had 25 million to go toward technological improvements, which is designed to improve and enhance ECAS.

In short, ECAS is an electronic filing program, it is an electronic record of proceedings, so it gets rid of the paper files, and it has judicial tools that allow the immigration judges to more effectively go through the documents, take notes, and follow what is going on. We believe it will make proceedings even more efficient in the future. It will also free up space right now that is currently being dedicated to file rooms and docketing rooms, that we can then put other employees, other judges, utilize them better in more effective ways.

Mr. ADERHOLT. What is your time frame for full implementation of this new system?

Mr. MCHENRY. We intend to—we completed the pilot last year and we are right now sort of assessing the results of that pilot. Because of the equipment involved, there is a little bit of lead time before we can roll it out nationwide, but we expect to do that by the end of this calendar year. It has to be done in phases. Obviously, EOIR is a large system, we have 65 courts and adjudication centers nationwide. We unfortunately can't just implement it overnight or turn on a switch. So it will probably be done in phases, I would expect definitely into 2020 and probably into early to mid 2021 as well.

Mr. ADERHOLT. What do you anticipate as far as trying to implement the ECAS system from being fully implemented, is there a particular hurdle that you see as problematic or—

Mr. MCHENRY. Right now, time is the biggest hurdle. Once we get the equipment, you know, then we can start rolling out. There will be a time lag, there will be training that needs to be done and that sort of thing, but at this point it is just time.

Mr. ADERHOLT. Thank you, Mr. Chairman.

Mr. SERRANO. Thank you.

We will now begin the questioning. Those who were here last time remember that the system we use is who was here at the time of the gavel, and then who came later, and we will go back and forth from that. And we will try to stick—or we will stick, espe-

cially today, to the 5-minute rule, or you hear this gentle and very soft, my lovely way of saying okay. [Laughter.]

Mrs. Lawrence.

Mrs. LAWRENCE. Yes. Thank you, Mr. McHenry.

IMMIGRATION JUDGE (IJ) AUTHORIZATION AND HIRING

I have a question. Currently, we know that there are a backlog of cases and my question to you is, how many vacancies for authorized judges do we have on field today?

Mr. MCHENRY. I can't give you the number precisely today. What I can say is that, once we process all of the judges that we currently have in place, we will only have about eight vacant courtrooms remaining. So we have 427 judges currently, we are going to be at roughly 450 in a couple of months. We have 428 courtrooms right now and that is going to be up to I think 460, in that neighborhood, in a couple of months. So we are going to be at almost full capacity. The authorization is of course 534, but we will need to increase our space to be able to bring the judges on.

Mrs. LAWRENCE. So the allocation and what we appropriate for is for 500 and how many?

Mr. MCHENRY. Five hundred and thirty four.

IMMIGRATION COURT OPERATING HOURS

Mrs. LAWRENCE. Has there been any discussion of extending the hours of operation?

Mr. MCHENRY. That is something actually that we have looked at at different courts. It is difficult to do logistically, not only to find people who are willing to do that, because we need legal assistants, we need interpreters, we also have to discuss security concerns. Some of our courts are located in public buildings and it may be difficult to hold them open after hours. It is something that we have looked at, but at least in the non-detained setting it hasn't shown to be viable just yet.

LEGAL REPRESENTATION IN IMMIGRATION COURT

Mrs. LAWRENCE. One of the greatest obstacles proposed by the remote nature of most facilities, a study conducted by the LA Times in 2017 found about 30 percent of immigrants in detention are jailed more than 100 miles from the nearest government-listed agency Legal Aid resource on the pro bono list distributed by ICE and the immigration courts.

I want you to know that represent—I am sure you agree, representation matters, particularly given the complex nature of immigration law. The vast majority of immigrants in detention are under-represented. Fewer than one in five are represented. Immigrants in detention are twice as likely to succeed in their cases if they are represented.

What training do you provide to judges who hear detained dockets to ensure their respondents are given enough time and support to obtain counsel, and if they are unable to do so, to be provided or apprised of their rights by the judge?

This is a major concern, Mr. McHenry.

Mr. MCHENRY. Both by statute and regulation, the immigration judges are required to apprise all respondents of their right to counsel at no government expense. They are also required to provide them with a list of pro bono or low bono-type service providers. By policy, we typically give at least one continuance to look for an attorney. By statute, they are allowed 10 days before their first hearing to seek counsel.

Once they are in proceedings, the judge will also look out for their rights, will explain the nature of the proceedings to them, if they are unrepresented. If they are unrepresented and they are seeking asylum or some type of benefit, the judge will also explain the qualifications for that.

Mrs. LAWRENCE. Do you find having one in five, only one in five are represented, what is your response to that data?

Mr. MCHENRY. There are many arguments on that and the data, at least in the detained setting, is sometimes inconclusive. Many respondents who are detained are detained for serious criminal charges or serious criminal convictions, and thus there may not be much that an attorney can do for them in proceedings, and many attorneys as a matter of—

Mrs. LAWRENCE. But they are under-represented, so it is not an attorney. So are you saying that, if they commit a crime, then there is no need for an attorney, is that what you are saying?

Mr. MCHENRY. What I am saying is that many attorneys as a matter of ethics won't take a case for someone if they can't do something for them in immigration proceedings. So there may be some sort of selection bias going on in terms of looking at the overall representation number for detained aliens. We have—

Mrs. LAWRENCE. So make me understand that. So, if I am a detainee with a criminal record, you are saying that the attorneys don't want to take their case, so therefore they go through the system unrepresented?

Mr. MCHENRY. For example, an individual who has a drug trafficking conviction and has no fear of returning to their home country, is ineligible for almost everything under the immigration laws. An attorney who talks to that individual is unlikely to take their case, is unlikely to charge them money, because they understand as a matter of law they can't do anything in the proceedings.

We haven't drilled down to know—and it is a level of granularity that I am not sure we could get at it—to know how many individuals don't have counsel because they haven't looked for it or because someone won't take their case, or for some other factors.

Mrs. LAWRENCE. I will wrap up with this. In our country, representation in the legal process is something that is an expectation and what you just said to me is something that needs to be corrected.

Thank you. And I yield back.

Mr. SERRANO. Thank you.

Mrs. Roby.

Mrs. ROBY. Mr. Graves was here before me—

[Audio malfunction in hearing room.]

Mr. SERRANO. Yes, we went to the videotape. [Laughter.]

I apologize.

Mr. GRAVES. Thank you. Thank you for the southern hospitality too from the gentlelady from Alabama.

Director, thank you for being here. You have a daunting task. Myself and Mr. Palazzo were a part of the conference committee that dealt with border security funding here a few weeks ago, and we were briefed on a lot of the details and information as to why the President and the Administration made the request for 75 additional judges that came through your department.

FY 2019 IMMIGRATION JUDGE AUTHORIZATION REQUEST

Was your request, which was granted in that bill, contingent on the comprehensive nature of the request? In essence, were 75 judges, in your opinion, sufficient if the full request was funded, or was it based on an open border system or a current border deterrent system or a more advanced deterrent system?

Mr. MCHENRY. Our request was sufficient for our needs at the time it was made and, again, we are very appreciative for the subcommittee fulfilling that request.

Mr. GRAVES. Is it sufficient for your needs today?

Mr. MCHENRY. Our challenge going forward—and, again, the next week or the next couple of weeks the Department will submit the formal budget request that may more directly answer your question, but our challenge going forward is, with increased amounts of immigration, EOIR sees most of the downstream effects of that. Many individuals come here and they make asylum claims, they are placed in immigration proceedings, so they end up in our court system. So we know as a matter of data, as a matter of statistics, the more immigration that we have, the more likely we are going to have increased court cases.

Mr. GRAVES. So the request was made in December of last year in conjunction with the \$5.7 billion request for a border fence or wall, in addition with a lot of other things, including investigators and detention beds and Border Patrol and Customs. Do you sense that you would need additional judges if the rest was not fully funded as requested originally in December?

Mr. MCHENRY. I don't necessarily want to speak out of turn, because most of those are requests from the Department of Homeland Security, and we typically wouldn't comment on another agency's budget.

NON-DETAINED AVERAGE CASE COMPLETION TIME

Mr. GRAVES. That's fine. On average, a non-detained individual has 672 days before his or her case is heard; is that correct?

Mr. MCHENRY. Before the case is completed; there may be multiple hearings along the way.

Mr. GRAVES. So they are not detained. Where are they when they are not detained?

Mr. MCHENRY. We have 65 courts nationwide, approximately 40 of them hear non-detained cases.

Mr. GRAVES. But where are the individuals who are not detained for 672 days?

Mr. MCHENRY. Typically, at their house or wherever they happen to reside.

Mr. GRAVES. The country of origin or—

Mr. MCHENRY. No, in the United States or wherever they are residing.

Mr. GRAVES. In the United States. So, for 672 days they are in the United States. What percentage of them actually return to have their case heard?

Mr. MCHENRY. It is a difficult question to calculate the percentage, because there may be—

Mr. GRAVES. It should be pretty easy, either they show up or they don't.

Mr. MCHENRY. Well, there may be reasons that they don't show up at a particular hearing, there may be issues with notice and things like that. What we know, at least on this fiscal year, it is about 44 percent of our cases have resulted in an in absentia, which means they weren't present for it, that represented in an in absentia removal.

Mr. GRAVES. So about 45 percent don't show back up. Where do they end up? Do they go home?

Mr. MCHENRY. The Department of Homeland Security would be in a better position to answer that than I. They do have an order of removal outstanding. At that point—

DETAINED V. NON-DETAINED AVERAGE CASE COMPLETION TIME

Mr. GRAVES. So help me understand. What is the difference then in 40 to 45 days until a hearing for someone that is detained versus somebody that is not detained waiting 2 years, why is that different?

Mr. MCHENRY. For a number of reasons. Detained cases, as I said, are expedited, they are always a priority. Typically—

Mr. GRAVES. So would it be better to have more detention facilities, so that cases can be expedited, or is it better to have less detention facilities, so that 45 percent don't show up?

Mr. MCHENRY. That would be a question probably better directed to the Department of Homeland Security, since they maintain—

Mr. GRAVES. It is a good question for you too here today.

Mr. MCHENRY [continuing]. They maintain the detention system.

Mr. GRAVES. In your opinion, after all you have seen, you have an 850,000 person backlog—I assume that is not because of the Department's lack of work, but it is probably due to additional apprehensions, as we have seen in the news. Do you consider this a national emergency?

Mr. MCHENRY. Again, I am not in a position to really comment on semantics—

Mr. GRAVES. You have expertise, you can—

Mr. MCHENRY [continuing]. Or labels. What I can say, as I alluded to earlier, we do see the downstream costs. Increased immigration does lead to increased court cases.

Mr. GRAVES. I appreciate your attempt to avoid that question, I know it is difficult. We all get that question and we are grappling with that today, but I would say that an 850,000 person backlog that has increased 14 percent or more each year over the last 8 years might be an emergency, and it is okay to say that.

Mr. Chairman, I will yield back.

Mr. SERRANO. Thank you. And once again we apologize for the order, since I hadn't seen that you had stepped out of the room before the gavel went down and you were here before.

Mr. GRAVES. Thank you.

Mr. SERRANO. So I am sorry for putting you in the category of forgotten, but not gone.

Mr. GRAVES. So I am free to go. [Laughter.]

Thank you, Mr. Chair.

Mr. SERRANO. Mr. Case.

Mr. CASE. Thank you.

Director, at the bottom of your testimony, the second-to-the-last paragraph, you have this statement: "The nature and timing of the fiscal year 2019 process has left EOIR short of fulfilling all of its current operational needs, and it is limited in its ability to reform programs that are not cost effective."

What does that mean? What are you trying to say there? I think there are two parts to that. One is fiscal year 2019 and the second part has some reference to programs that are not cost effective.

FY 2019 BUDGET REQUEST

Mr. MCHENRY. The first part, as I have alluded to, you know, we have challenges. We have had a number of things come up, most recently, probably the biggest one is the interpreter issue has returned.

In terms of cost effectiveness, the subcommittee is aware, obviously, of the study that we did of the Legal Orientation Program last year. We have now completed that, or at least the first two phases of it, we know what the costs associated with it are, and it is something that the Department I think would like to engage with the subcommittee at a later date to sort of talk about what its best posture is going forward.

Mr. CASE. Okay. So, on the first part, the 2019 budget, what you are saying is the interpreter issue came up basically after the 2019 budget process?

Mr. MCHENRY. As I have said before, the interpreter issue has been sort of an off-and-on and ongoing concern, but it has become more acute, again, as we have brought in more judges and we have heard more cases and they have completed more cases.

Mr. CASE. Okay. And then the second part again, so this reference to cost effective is to the Legal Orientation Program; is that right?

Mr. MCHENRY. To an extent. That is one of the programs that we looked at and we evaluated. We know what its costs are, at least to us and government-wide, and it is something that we would like to engage the subcommittee on going forward.

LEGAL ORIENTATION PROGRAM (LOP)

Mr. CASE. Okay. You have not then today made any determination that this program is not cost effective?

Mr. MCHENRY. We know what the costs associated with it are, but the future would be—as I said, that would be part of a dialogue or a discussion that we would have with the subcommittee.

Mr. CASE. Yeah, I am just trying to get a sense of where you are right now, because, you know, I am presuming from what I have

read here that there is some disagreement over whether this program should be continued or not. I mean, it went for a while, it got, you know, great reviews by the ABA, who alleges that it—or claims that it was cost effective, that it reduced backlogs by some 20 percent. That was based on a 2012 study. You have said that that 2012 study came under unusual circumstances. I don't know what that exactly means, but the fact that there is a very significant body of folks out there who thought it was cost effective. You suspended it to do another study on it.

It is good to know that that study is proceeding, but I am just asking you where you are right now on it, because, you know, this is, frankly, a little confusing language. I don't know whether it is circular a little bit, "it is limited in its ability to reform programs that are not cost effective."

So I don't know whether you have already decided you are not going to try to reform this program or whether you have decided that you are still thinking about it, or whether you have decided that, you know, you are going to run with it, I am not sure which one it is.

Mr. MCHENRY. We have decided we would like to talk to the subcommittee more about it.

Mr. CASE. Okay, so no decision yet on—do you have an opinion on whether it is cost effective today?

Mr. MCHENRY. We would rely on the study that we have, that we have done in the past year that I believe was provided to the subcommittee.

Mr. CASE. Right, which is not finished.

Mr. MCHENRY. The first two phases of it, the third phase is not finished.

Mr. CASE. Okay. So you are still open on this program, subject to discussing it with the subcommittee.

Mr. MCHENRY. Yes. In fact, we have expanded it recently, I think, into a facility in Mississippi.

Mr. CASE. I see. So it is not suspended then?

Mr. MCHENRY. No, it was never suspended—

Mr. CASE. Okay.

Mr. MCHENRY [continuing]. It is still ongoing.

Mr. CASE. All right. I guess, you know, I read all this stuff and I just ask myself, where is this all going? I know this is kind of a big-picture question, but you have got incredible backlogs here. We can debate whether they are an emergency or not, you know, from my perspective, it doesn't matter, the backlogs are there.

EOIR'S CASE BACKLOG

When we look out into the future, do you have projections about whether your demand on your system will continue to increase at this kind of a rate and, if so, how you are going to actually deal with that increase in demand?

Mr. MCHENRY. The projections would probably best come from DHS, because we are contingent upon their inputs, the number of new cases they are filing. We know how many they have filed over the past couple of years, it has been around 300,000. So, when we look at our projections, we are sort of basing it off of that number

continuing, but they would have the most accurate and the best up-to-date data.

Mr. CASE. So you are taking their figures and you are calculating an increase in demand still, right?

Mr. McHENRY. Yes. As I alluded to in my opening statement, we have largely solved the problems on our side in terms of processing. We are able to hire more judges, we are able to move the cases more efficiently, but the number of inputs has gone up considerably. If we were still looking at the cases that we saw in 2015, the backlog would already be going down, but there has been a tremendous increase over the past 3 or 4 years and that is what is driving it right now.

Mr. CASE. Yeah, I guess that is my point, because it kind of seems like you are chasing a car that is going faster than you are running.

So I am trying to figure out what—sorry, I still stop there, because I have been very unsubtly—

[Laughter.]

Mr. SERRANO. Mrs. Roby.

Mrs. ROBY. Thank you, Chairman.

Director McHenry, thank you again for taking the time to be here and come before the committee to address our concerns.

In your opening statement, in an email address to your colleagues, you highlight shortfalls within the fiscal year 2019 funding levels, it has already been brought up today. You mentioned cost increases associated with increased transcription, data analytics, and other operational necessities. The most dramatic increase, though, was with the interpreter costs, which I know several of my colleagues have addressed.

In perspective, interpreter costs were \$17 million in fiscal year 2017, \$60 million in fiscal year 2018, and expected to approach \$110 million for fiscal year 2019.

But you go on to say, quote, “This challenging budget situation has led us to a position where difficult financial decisions need to be made.”

FY 2019 RESOURCE CONSTRAINTS

So I would like it if you would tell us what difficult financial decisions you are referencing, and what decisions have been or are being made to address these?

Mr. McHENRY. The formal decisions will be made by the Department when the spend plan is issued, which I think is coming in a few weeks as well.

The email is designed to sort of lay out priorities. Our employees know the situation, they know that we have unprecedented growth, unprecedented hiring, unprecedented case completion numbers, all due to the support of Congress and the Administration; they have questions about where do we go next. We have essentially been trying to dig ourselves out of a hole for the last 2 or 3 years, and we are getting sort of to the top of that, and they want to know what are the next steps.

So we have outlined sort of what we see as the priorities going forward for the remainder of the fiscal year and that is what it is designed to convey.

Mrs. ROBY. Okay. You continue in your statement that you do not expect to be able to continue to hire and onboard staff at the pace previously set, and that you expect delays, to include the hiring of immigration judges with no new class after the one scheduled for April. You mention you will not be able to hire 250 attorneys that are needed.

So my question gets to this, what resources do you require from Congress to address these shortcomings, and are you able in your current capacity to keep up the pace you have been on, or do you expect the Department to slowly start falling even further behind?

Mr. MCHENRY. We definitely don't expect to start falling further behind. We have set, as I have alluded to, a fairly, to my mind, impressive pace in terms of hiring and adjudications, that should continue for the foreseeable future.

In terms of resources, again, it wouldn't be appropriate for me to get out ahead of the Department or OMB for the release of the actual request.

Mrs. ROBY. Okay. Well, again, I appreciate your time being here with us.

And, Mr. Chairman, I yield back.

Mr. SERRANO. Thank you.

Mr. Cartwright.

Mr. CARTWRIGHT. Thank you, Mr. Chairman. Thank you, sir.

Mr. SERRANO. Our vice chairman. We are going to get you a thing that says vice chairman on it.

Mr. CARTWRIGHT. And I hope to be forgotten, but not gone as well. [Laughter.]

IMMIGRATION JUDGE (IJ) PERFORMANCE MEASURES

Mr. CARTWRIGHT. Director McHenry, thank you for joining us today. I wanted to talk about a few areas, the first one was case completion quotas.

I was an advocate in the courts for 25 years and one thing we constantly heard from the Federal courts was statistics, you know, how can we hurry cases through the system. And every time I heard that, it made me think, what about justice? You know, are we sacrificing justice for speed.

A new EOIR policy that began under Attorney General Jeff Sessions was case completion quotas. Beginning in October of 2018, judges were informed that they were expected to meet a quota of 700 cases completed a year or they could be fired.

Doesn't prioritizing metrics in case completion make it harder thoughtfully to dispose and adjudicate these cases, and easier simply to deny applications for entry into the United States?

Mr. MCHENRY. I think this question comes back to a point I made earlier that to our mind this is sort of a false dichotomy. There is no reason that judges can't be both impartial and respect due process and also be efficient. Again, we don't call them quotas, because they are not strictly black and white, but they are not novel, nor unique to us. A number of other agencies use them, in fact they are fairly widespread, and we are not aware of any sort of significant or systemic issues that have arisen because of them.

Mr. CARTWRIGHT. Well, you understand what I'm getting at and the question is, what specific steps has EOIR taken to ensure that

setting quotas or targets like this doesn't hamper a judge's ability to examine each case comprehensively and justly?

Mr. MCHENRY. All of our judges are properly trained. They are expected to know the law, to understand the law; they are expected to adhere to the law and to apply it. And they also understand the law is very clear that they can't deny a case, or deny a continuance or something like that, solely based on a performance measure or a case-completion goal.

Mr. CARTWRIGHT. Now, of course our immigration courts are structured differently from other courts. They are housed within the Department of Justice and immigration judges report directly to the Attorney General of the United States; correct?

Mr. MCHENRY. They are appointed by the Attorney General; there are several layers of management between them, but they are appointed by him.

Mr. CARTWRIGHT. And the buck stops at the Attorney General; correct?

Mr. MCHENRY. By statute, yes.

Mr. CARTWRIGHT. And, if the Attorney General chooses, he or she can assign a case to a new judge or even reverse a decision; am I correct in that?

Mr. MCHENRY. The Attorney General does have certification authority to refer decisions to himself from the Board of Immigration Appeals.

Mr. CARTWRIGHT. Right. So, when judges are given case-clearing quotas that they must meet or potentially lose their jobs, and their decisions must be approved by a potentially partisan supervisor, do you have a concern that this system might result in something less than objective and independent adjudication?

Mr. MCHENRY. The immigration court system has been part of the Department of Justice since 1940. Almost every Attorney General, to my knowledge, with rare exceptions has exercised review authority. This is a situation that is neither new or that uncommon. And, again, we are not aware of any systemic issues that have arisen because of it.

Mr. CARTWRIGHT. Well, you know what I am going to say about that, I am going to say, well, we have always done it that way is something less than a full discussion on the merits.

Do you have a concern that partisanship can enter into the adjudication process?

Mr. MCHENRY. I am not aware of any partisanship for anything in the adjudication process. The Attorney General, by statute, is charged with offering controlling guidance on the immigration laws.

ADJUDICATION CENTERS AND VIDEO TELECONFERENCE (VTC) HEARINGS

Mr. CARTWRIGHT. Okay. I also understand that, in addition to immigration courts, EOIR has two adjudication centers, right, one in Fort Worth and one in Falls Church, Virginia?

Mr. MCHENRY. That is correct.

Mr. CARTWRIGHT. Okay. At these centers, judges hear cases from around the Nation via teleconferencing, right?

Mr. MCHENRY. Video teleconferencing, yes.

Mr. CARTWRIGHT. Video teleconferencing, right. And my understanding is judges at the adjudication centers, they are at the adjudication centers, while the attorneys and respondents are in separate locations around the country. But in February of this year seven detainees, along with three public defender groups, filed a federal lawsuit against ICE and they said—and you are familiar with that suit, I'm sure——

Mr. MCHENRY. I am.

Mr. CARTWRIGHT [continuing]. They said reliance solely on video conferences has, quote, “had disastrous effects on detained immigrants, the ability of their attorneys effectively to represent them, and the efficiency of the immigration court,” unquote.

My question is, has the EOIR taken steps to examine whether teleconferencing impacts the attorney's ability to advocate for their clients or, for that matter, a judge's ability to provide due process to immigrants seeking fair adjudication?

Mr. MCHENRY. I can't speak specifically to the situation in Varick Street, obviously, because it is a pending litigation——

Mr. CARTWRIGHT. Certainly.

Mr. MCHENRY [continuing]. But what I can say is that our numbers don't bear out any sort of systemic issues.

During the first quarter of this fiscal year, we held about 29,000 VTC hearings, only 151 had to be adjourned due to some sort of video malfunction. We are in line with other agencies, including the Social Security Administration, the Department of Veterans Affairs, the Department of Health and Human Services, who have all found VTC to be a helpful, efficient, and useful tool.

It also helps us eliminate dark courtrooms and give individuals, respondents essentially an extra day of hearing that they might otherwise have to wait for multiple months or weeks.

Mr. CARTWRIGHT. Okay. So the answer is, yes, you have thought about it and you have reviewed it, and it is on your radar screen?

Mr. MCHENRY. Yes. We believe VTC is an efficient and effective way of hearing cases. It has been authorized in the statute since 1996 and we have found it to be generally successful.

Mr. CARTWRIGHT. Thank you.

I yield back.

Mr. SERRANO. Mr. Palazzo.

Mr. PALAZZO. Thank you, Mr. Chairman.

IMMIGRATION JUDGE (IJ) HIRING

Director McHenry, thank you for being here today.

To follow up on what Congressman Graves asked you, he was talking about the judges briefly, and originally we had \$5.7 billion in the President's budget and you asked for 75 additional judges, but it was reduced—for the wall, it was reduced to \$1.3 billion. If you had known that, would you have asked for more judges than the 75?

Mr. MCHENRY. Again, unfortunately, I am not sure I am in a position to answer hypothetical or to comment on——

Mr. PALAZZO. Could you use more judges——

Mr. MCHENRY [continuing]. Another department's budget.

Mr. PALAZZO [continuing]. Than 75?

Mr. MCHENRY. As I mentioned, it has been an Administration priority. You know, the President called for up to 700 total, and it has been a key part of our strategy of addressing a backlog. And, again, the subcommittee has been extremely supportive of us in those efforts.

Mr. PALAZZO. And, Mr. Chairman, you know, something that keeps popping in my mind, and Congressman Graves and I did serve as conferees on the Homeland Security appropriations process, and, you know, we seem to have a lot of our colleagues asking questions. Some of them are good questions, some of them, you know—I guess they are all good questions. But I was just always curious how many Members have actually been to the border and seen firsthand what our Border Patrol Agents, our ICE Agents, our judges, our local law enforcement officers, and local elected officials in the communities at large think about the crisis that we have at our border.

And I just want to continue to urge my colleagues, you know, to get down there and see firsthand. It is a wonderful trips, the professionals down there will tell you how it is, and you can see firsthand, you know, whether you want to see whether the wall works or not, or where the wall is applicable. It is great, you can see the ports of entry. When we were there, they apprehended seven kilos of cocaine the morning of going to a point of entry, and they say this just happens every hour on the hour.

But I kind of digress. So I would like to get back to, you point out that out of the judges that you had a target to hire in 2019—or your 2018 goal, you have come up short and you were only able to hire 20 judges, and you say it is due to an increase in interpretation costs. Can you describe how were you under-projecting the interpretation costs and it went up so much you can't hire the judges?

Mr. MCHENRY. Again, final decisions on hiring and so forth haven't been made. Those will be part of the spend plan that is coming. Right now, our projections are—we have another class coming in April and then we are not sure about the remainder of the fiscal year.

Interpretation is obviously part of it. Again, for reasons I have said there are more judges, means more cases, means more hearings, and it is something that we are factoring in definitely going forward.

INTERPRETER COSTS

Mr. PALAZZO. All right. So, interpreters, I mean, are not they a dime a dozen on the border? I mean everybody down there is pretty much bilingual in large part, so how are interpretation costs going up significantly?

Mr. MCHENRY. Unfortunately, it is not as simple as that. Our interpreters are required to be trained both, in simultaneous interpretation and consecutive interpretation. They need experience in a judicial setting before we can hire them. I think I mentioned previously, we actually advertised and we are looking to hire more full-time interpreters. We have about 60, I think, currently, on staff. When we put the ad out, we only had 12, 13, 14 who were able to actually pass the examination.

So, because, you know, we adhere to due process, interpreters are essential to most of our proceedings, we have to make sure that they are trained. And that they are proper.

Mr. PALAZZO. That is good to hear. From being able to discuss things with the professionals that are knowledgeable on the subject matter, we learn things every day to help us make decisions.

LEGAL REPRESENTATION AND THE LEGAL ORIENTATION PROGRAM
(LOP)

One of our—my colleagues mentioned earlier, she kept talking about representation. If you are here illegally, are we obligated to provide representation to people here illegally?

Mr. MCHENRY. In general, the statute, the Immigration Nationality Act provides aliens a right to counsel, but not at government expense.

Mr. PALAZZO. And so, there is a legal orientation program made up of non-government entities. Can you kind of describe that process.

Mr. MCHENRY. Sure. Legal orientation, or LOP, is sort of an umbrella term and we have several subgroups under, but I think the main one that the subcommittee has been interested in is the general LOP, which goes to detention facilities across the country and they do one of four tasks. The primary one is sort of know your rights presentations; explain to the detainees, to the respondents what to expect, what is going to happen. After that, they may do follow-up individual consultations. They may refer them and things like that.

Mr. PALAZZO. Do you ever feel like they may be coaching the detainees to cheat the system to, you know, try to, hey, this is how you get a credible fear claim, you know, all you have to do is say this keyword and you are free.

Mr. MCHENRY. I am not as familiar with on-the-ground facts and I haven't observed any LOP briefings. I am not aware of any concerns like that, but, again, it is something that we can take back to—

Mr. PALAZZO. We heard there are NGOs where, actually, these people are coming from, they are actually coaching them how to get through, whether it is to the coyotes, the cartels who are profiting off of this. So, that is somewhat of a concern that I have.

But if people come here illegally, that is still against the law in our country, correct? And what would that charge be?

Mr. MCHENRY. Illegal or improper entry is a crime. It is under 8 U.S. Code 1325.

Mr. PALAZZO. And that is a misdemeanor?

Mr. MCHENRY. First offense is a misdemeanor.

Mr. PALAZZO. And the second offense?

Mr. MCHENRY. It can go up to a felony.

Mr. PALAZZO. And, all right. Well, I yield back.

Thank you, Mr. McHenry.

Mr. SERRANO. Mr. Palazzo, since you started your comments before my saying, "Mr. Chairman," to the extent I will have to sort of answer in a way, the chairman's opposition to a wall does not fall under the usual arguments that you will hear. It is just that this country, our country of all countries should not build the wall.

Not the country that has the Statue of Liberty. We have immigration and we have to deal with that, absolutely, but not a wall. Not this country.

Mr. PALAZZO. Mr. Chairman, since you brought it up, I think—

Mr. SERRANO. You brought it up.

Mr. PALAZZO. That was not directed for you to respond to what I discussed. I was thanking Mr. Chairman for being recognized—

Mr. SERRANO. Oh, OK.

Mr. PALAZZO [continuing]. Recognizing me to speak, but I think a combination of a defensive barrier, boots on the ground, and technology, would well-serve and protect an American and American citizens.

Mr. SERRANO. Thank you. Ms. Meng.

Ms. MENG. Thank you, Mr. Chairman. Thank you, Director McHenry for being here today.

I wanted to also address comments made by Mr. Palazzo, if I may. Many of us, including myself, have been to the wall. It is arguable that there is a crisis at the border; in fact, much of the backlog in our immigration courts can be arguably said that it is manufactured.

We have—Mr. Serrano has a constituent and many of us have been working with his office, where a gentleman who has worked and paid taxes in this country for 25 years, is a union member, has been separated from his family. We have cases of thousands of children who have been separated from their families, and so, if we are talking about backlogs and, you know, prioritizing our resources, I think that we can do better in this area, as well.

LEGAL REPRESENTATION FOR UNACCOMPANIED ALIEN CHILDREN (UAC)

I do want to ask about legal representation for children. There are so many reports of young children appearing unrepresented in Immigration Court which brings attention to the availability or lack thereof of legal representation for them in removal proceedings. And representation in immigration proceedings is particularly critical when the respondent is a minor.

Do you believe people in deportation proceedings should be entitled to an attorney if they cannot afford one, and what is the policy?

Mr. MCHENRY. There are a couple of responses here. First, the issue, specifically, of representation for children is one that is very much in litigation; in fact, it is pending, so I am sort of limited in the amount of comments that I can make. But I would say, at least based on our statistics, if you are looking at unaccompanied alien children, at least for those whose cases have been pending for a year, the representation rate is close to 80 percent. It is similar—80 percent for asylum-seekers, as well. So, a good number of our cases are represented.

In terms of the law, the law provided that an alien, the respondent is entitled to an attorney at no expense to the Government. Our judges explain the rights. They explain the proceedings to the respondents. They provide a list of pro bono providers if the respondent is unrepresented, and, again, they generally give some time to look for an attorney.

Ms. MENG. I appreciate that, and I know that judges do explain. Do you agree with—there was a case a few years ago where an immigration judge, who was, himself, in a leadership position at EOIR was criticized for saying, “I have taught immigration law, literally, to 3 year olds and 4 year olds. It takes a lot of time. It takes a lot of patience, but they get it. It is not the most efficient, but it can be done.”

Do you agree with his statement?

Mr. MCHENRY. I am familiar with that statement and it is unfortunate. It was mentioned several years ago, but it comes up periodically. There are a couple of responses to that. First, the judge’s role is not to teach anyone the law in proceedings; the judge’s role is to adjudicate the case based on the facts and evidence before them and to ensure that due process is respected.

It is always an unfortunate situation when you have situations with children as young as 3 or 4 who have been smuggled or who have been brought to the United States illegally and unknowingly. It is always a rough situation having them in proceedings.

But our judges, again, they are trained. They understand how to deal with the sensitivities in terms of dealing with young respondents. They are trained to know what to do and how to maintain the case, how to oversee the case to ensure that their rights are respected and that any claims are properly adjudicated.

Ms. MENG. I agree with you that judges should not be teaching law to our toddlers, and that can also contribute to a lot of the backlog in our Immigration Courts. Since that article came out, what has EOIR done to improve quality and frequency for children’s representation? I know you mentioned it is about at 80 percent. Do you think the system would benefit from universal representation of children in immigration proceedings?

Mr. MCHENRY. Again, that sort of gets to a hypothetical question and also a question of litigation, so I can’t—it’s not appropriate to answer it directly. What I can say is that our judges, they are trained. They are trained in children’s cases. They have special procedures. They understand the law. They protect the due process rights of all respondents, including those who are young.

NOTICES TO APPEAR (NTAS) IN IMMIGRATION COURT

Ms. MENG. If I have time for one more question, I wanted to ask about a recent Supreme Court decision stating that all notices to appear at Immigration Court must include a date, time, and location. EOIR knowingly began to provide DHS components with artificial hearing dates to circumvent these requirements. What steps have been taken to remedy incorrect NTAs and to provide proper notice to affected individuals.

Mr. MCHENRY. These were—we are aware of this situation because it flared up two or three times in the fall and then, again, in January. But the dates that we provided are not—they have been called “fake dates”—they are not fake dates. There is perhaps a lack of understanding of how the system works.

The Department of Homeland Security is responsible for serving respondents with the notice to appear. So, when a respondent receives that, they see the date on that document; however, we don’t know about it until DHS also files it with us, which is sort of a

second step in the process. And we need to receive that document in a timely fashion so we can make sure it is correctly processed and the case is entered into our system and that we are ready to hear it.

So, sometimes, there is some slippage and we understand people may think that they have a court date, but until the document is actually filed with us, we don't have jurisdiction, and for us, there is no court date. Now, we have worked with DHS and are remediating that situation. We have an interactive scheduling system that allows them to schedule these cases electronically, so that we are more aware of them on the front end and we don't expect a re-occurrence of the situation going forward.

Ms. MENG. All right. I mean, as you know, people take time off from work. They have to provide childcare. They may have to travel hours to get to these courts and, in fact, internal EOIR emails indicate, for example, that on June 27th, 2018, an assistant chief immigration judge authorized the use of these fake or dummy hearing dates—and I appreciate the explanation—do you agree with that? Is that blanket policy?

Mr. MCHENRY. We actually issued a policy memorandum on this in response to some of the issues in the fall. It was issued right before the shutdown, so it may not have gotten as much attention as it should have. But we have worked with the Department of Homeland Security. We are not providing them the dates any more; instead, we have given them access to our interactive scheduling system, ISS, so it should be—they should be using it to schedule them electronically going forward.

Ms. MENG. Thank you. I yield back.

Mr. SERRANO. Mr. Crist.

Mr. CRIST. Thank you, Mr. Chairman.

EOIR'S CASE BACKLOG

Mr. McHenry, thank you for being here. I appreciate your testimony. I am kind of curious about the backlog situation. What did you say is the current backlog of cases?

Mr. MCHENRY. The current pending caseload is about 850,000. It is perhaps inaccurate to say that they are all backlogged, because that includes some that were filed just yesterday or in the past two or three weeks, but that is—

Mr. CRIST. Cases that have not been heard?

Mr. MCHENRY. Right. But that is basically the ballpark.

Mr. CRIST. OK. Thank you.

Do you know, what is the highest number of cases that have not been heard ever in your agency's history?

Mr. MCHENRY. I can't speak to the entire agency's history, but 850,000, I think is the largest pending caseload that we have had.

Mr. CRIST. It is the largest—highest it has ever been—

Mr. MCHENRY. As far as I know—

Mr. CRIST [continuing]. In the history of America.

Mr. MCHENRY [continuing]. But, again, I can't speak to the—to it in the past completely.

Mr. CRIST. Excuse me?

Mr. MCHENRY. I can't speak to it beyond—we were created in 1983—I can't speak to anything beyond that time, but it looks like it is the largest.

Mr. CRIST. Well, I wouldn't expect you to. So, since '83, it is the highest it has ever been?

Mr. MCHENRY. Yes.

Mr. CRIST. OK. Why do you think that is?

Mr. MCHENRY. It is a combination of factors.

Mr. CRIST. Please.

Mr. MCHENRY. And you have to sort of look at the backlog in two stages. From about—because it didn't happen overnight—from about 2008 until about 2017, it was driven by a lot of the factors that I alluded to, you know, lack of productivity, lack of hiring, a lack of emphasis on the need or the importance, significance of completing cases.

As we have addressed those problems with the subcommittee's assistance and support, the recent increases are for different factors; they are mostly external factors. We have seen an increase in immigration. We have seen an increase in asylum claims. They have doubled in the past couple of years. Stepped up enforcement efforts. All this means that more new cases are coming in.

Last year, DHS filed approximately 300,000 new cases, which is roughly a hundred-thousand increase over what they had filed just five years ago—four years ago. So, right now, it is increasing because the inputs are stripping our completions, but we are catching up. Again, with the support that we have received, we get more judges onboard, we are completing more cases, and we are going to be improving.

Mr. CRIST. Let's say five years ago, 2014, any idea what the number was at that point in time?

Mr. MCHENRY. I don't have it in front of me. The chart is available on our website. We know the backlog, essentially, or the case-load, essentially, almost tripled between 2008 and 2017.

Mr. CRIST. 2008 and 2017 it tripled?

Mr. MCHENRY. Yes.

Mr. CRIST. How much has it increased since 2016?

Mr. MCHENRY. I don't have the number from 2016, because we go by different fiscal years. I do know that since the end of fiscal year 2017, it has increased by about 30 percent.

Mr. CRIST. Thirty percent. Is that typical for an annual increase?

Mr. MCHENRY. Well, that is a—it would be more than a year now since it was from fiscal year 2017. The rate has gone up. It sort of depends on which year you are looking at. I don't know if I would say it is typical or not.

Mr. CRIST. The rate has gone up?

Mr. MCHENRY. It has.

Mr. CRIST. And what would you attribute that mostly to?

Mr. MCHENRY. Oh, as I alluded to: new cases coming in, the increased numbers of new-case filings.

Mr. CRIST. And what is causing that?

Mr. MCHENRY. Increased immigration. The Department of Homeland Security files the cases with our court system so all new cases come from them.

Mr. CRIST. So DHS is more active in terms of numbers?

Mr. MCHENRY. They are filing more cases, yes.

Mr. CRIST. Yeah. So, the average wait for a case to go, as I understand it, is 780 days; does that sound right to you?

Mr. MCHENRY. The median time for a case, a non-detained case to be completed is around 660, 670 days.

Mr. CRIST. Do you think that is a reasonable amount of time for a human being to wait for justice?

Mr. MCHENRY. We don't. In fact, we have, among our case-completion goals and support-level goals—these are not the judge-performance measures—we seek to complete all of our priority cases, all of our non-detained priority cases, within one year.

Mr. CRIST. What is the single thing most important to speeding up that process in a fair way?

Mr. MCHENRY. As we have alluded to: more adjudicators. The number-one factor in our strategy to combat the caseload is increasing our adjudicatory capacity and that means more immigration judges.

Mr. CRIST. How many do you anticipate would be appropriate?

Mr. MCHENRY. As I have indicated, the president called for an additional 370, and that is the number that we have been looking at. Obviously, those are not all at one time or over one fiscal year. The Department will present its proposal for each fiscal year, as it has done in the past.

Mr. CRIST. Well, if you were asked today, what would you ask for?

Mr. MCHENRY. Again, it is—

Mr. CRIST. You are the guy running the department.

Mr. MCHENRY. I appreciate that very much—

Mr. CRIST. Me, too. That is why you are here.

Mr. MCHENRY [continuing]. But it is not appropriate for me to get out ahead of the Department or OMB; they will present the formal request in the next couple of weeks and that will be the number that we need.

Mr. CRIST. You are probably the most hands-on guy with this issue and you won't tell us what you think the numbers should be?

Mr. MCHENRY. As I—

Mr. CRIST. Who should we go ask?

Mr. MCHENRY. As I said, the Department will provide that to you.

Mr. CRIST. The Department? What does that mean for the human being that is associated with that?

Mr. MCHENRY. The Department of Justice in the next couple of weeks.

Mr. CRIST. Very well. Thank you.

Mr. SERRANO. Welcome to this level of appropriations where we always get. Well, we have to check with the Department. We sort of understand it.

Mr. Aderholt.

Let the record show that we have broken tradition and we go to Mr. Aderholt to start off second round. That will never happen again, but—

Mr. ADERHOLT. Thank you, Mr. Chairman.

VIDEO TELECONFERENCE (VTC) HEARINGS

I want to talk about video teleconferencing. Of course, the technology allows court proceedings to be conducted efficiently, effectively, even though the participants are not all together at one site.

Can you talk about some of the benefits of video teleconferencing with regard to administration of your proceedings.

Mr. MCHENRY. Certainly. And we are not the only agency that does this. I mentioned the Department of Health and Human Services, Department of Veterans Affairs, Social Security Administration, most other adjudicatory agencies of our size use VTC on a widespread basis because it is efficient. It allows the agencies to conduct hearings in more locations. It is more convenient in some cases for the respondents or individuals who are appearing, and in our case in particular, it helps us get towards solving the problem of dark courtrooms.

Because of scheduling issues and judges working alternative work schedules, you know, we sometimes have courtrooms that are not used on particular days of the week on a regular basis. That is the equivalent of a lost hearing or a lost day of hearings, so the people who are waiting months or years for their hearing, we could actually be hearing their case, and that is what VTC allows us to do; to bring that case, to move that case to an earlier date so we can give that person an adjudication.

Mr. ADERHOLT. What is the role of video teleconferencing in the Criminal Alien Program?

Mr. MCHENRY. Criminal Alien Program, I think, is a label the Department of Homeland Security uses for a specific program. We use VTC, though, for what we call the Institutional Hearing Program, which is for respondents who are detained either in state or federal criminal custody. It allows us to complete their case more quickly so that by the time they have served their sentence or finished serving their sentence, they already have a decision in their immigration situation, and they could either be granted—they will either have the relief and get to stay or they will have a removal order that can then be executed by DHS.

Mr. ADERHOLT. Okay. What about—how do you ensure fairness to accommodate the needs of respondents and their representatives when they are using the VTC?

Mr. MCHENRY. Again, there is always going to be some place where the respondent and their witnesses or their representative can be when we do a VTC hearing. Respondents, as I said, have the right to counsel with no expense, so if they have representation, the attorney will have to be there.

Sometimes, the attorney is in the same court where the judge is and the respondent is by VTC. Sometimes the attorney is with the respondent—wherever the respondent is—and they both appear by VTC. In rare cases, we could do bridges, potentially, where they could both be in different locations and still have it done by VTC. But we make sure that the attorney is present for the hearing if there is one.

Mr. ADERHOLT. Are you doing any kind of upgrades to the video teleconferencing equipment, the audio equipment, or the simultaneous-interpretation equipment?

Mr. MCHENRY. We are expanding—we have expanded the digital-audio recording equipment as we build new courtrooms. We constantly look at our VTC equipment, our VTC connections. This is one issue that relates to the Varick Street litigation, so I can't get into it in too much detail, but we do continually monitor our equipment.

As the status, the statistics that I referenced earlier indicate, the error rate or the malfunction rate is typically less than one-tenth of 1 percent. So, we haven't seen as many technological issues as, perhaps, there have been in the past.

AVERAGE CASE COMPLETION TIME AND USE OF CONTINUANCES

Mr. ADERHOLT. In 2012, Office of Inspector General noted excessive delay in immigration case processing can undermine the administrative justice if witnesses are no longer available to testify, U.S. citizens, relatives die, or documentary evidence is lost; moreover, the failure to promptly resolve cases result in aliens with unsupportable claims for relief from removal, remaining in the United States longer while those with legitimate claims for relief remaining in legal limbo for unwanted lengths of time. Would you agree with that assessment?

Mr. MCHENRY. Well, the OIG report that you are referencing and also the GAO report in 2017, they both indicated or both noted issues with excessive continuances or proceedings dragging out for too long. That is one of the issues that we have looked at very closely and we have issued guidance on continuances.

Last year, the Attorney General issued a binding precedent decision, also clarifying the law for judges on continuances. We haven't run any recent statistics. I don't have anything immediately available, but we believe that we are moving in the direction where excessive and unneeded or unnecessary delays are not causing us as many problems as perhaps, in 2012.

Mr. ADERHOLT. But as far as agreeing with that assessment, would you agree with the overall assessment?

Mr. MCHENRY. I was not with the EOIR in 2012, so I can't speak directly to that, but I know that it has been a concern for many years and it is still a concern.

Mr. ADERHOLT. But, would you agree that it undermines the administration of justice if the witnesses are no long available to testify, if they die, or the evidence is lost?

Mr. MCHENRY. Well, certainly. The longer the proceedings go, you know, the loss of recollection, the loss of witnesses, all those will affect the viability of a particular case.

EOIR'S CASE BACKLOG

Mr. ADERHOLT. From your perspective, what do you see as the effects of the backlog?

Mr. MCHENRY. It is twofold, but it is perhaps two sides of the same coin. Individuals who are here who have no claim to stay are allowed to remain longer in violation of the law than they otherwise should have.

On the flipside, individuals who are here who have valid claims, it takes longer for those claims to be adjudicated, like, it takes longer for them to get the relief that they deserve.

So, in short, no one benefits from the backlog and that is why we have taken such significant steps to try to address it.

Mr. ADERHOLT. Thank you, Mr. Chairman.

Mr. SERRANO. Thank you, Mr. Aderholt.

MATTER OF A-B

Mr. Director, were you involved in any way in the decision by former Attorney General Sessions in the *Matter of A-B* Case which limits the use of domestic violence as an adjudication for an asylum claim?

Mr. MCHENRY. I am familiar with the AB decision, but it is another one that is very much in active litigation; in fact, part of it has been enjoined recently, so it is not appropriate for me to talk about it.

Mr. SERRANO. You support removing the category of domestic violence as a justification for an asylum claim?

Mr. MCHENRY. Again, asylum claims are individual; they are very much fact-specific. There has been case law on domestic violence claims going back to 1975, so it is not an issue that is particularly new or particularly novel. Our judges know that they adjudicate the cases based on the facts, the evidence, the claims before them, and in accordance with whatever precedent they happen to be bound by.

Mr. SERRANO. Let me—do you think at any moment you will be able to comment further or be involved more or do you think that while it is in the courts, we should just stay away from it at all?

Mr. MCHENRY. On the issue matter of AB?

Mr. SERRANO. Yes.

Mr. MCHENRY. The court case is pending and it is being challenged in different areas or it is being appealed in different areas. I don't know how long that process will take.

MIGRANT PROTECTION PROTOCOLS (MPP)

Mr. SERRANO. Thank you. The administration recently announced a new plan to require those seeking asylum at our southern borders to remain in Mexico while awaiting just of their asylum adjudications. This raises a whole host of potential problems for our immigration courts; for instance, how does the Court provide notices to appear to these individuals? How are they to appear to have their claims heard?

And as I was reading this question—as I am reading it now, I am thinking also—and maybe this is solely out of left field—but if some of these folks are running away from violence or from physical danger, I think the last thing they want is for their local post-man knowing they are getting a letter or something from the U.S. Asylum Office or something from Immigration, because that will target them as being involved in trying to get out. Maybe I am thinking too much, but those folks are facing a lot of hardships.

So, how do you think this will work out?

Mr. MCHENRY. Notice is always a concern for all of our proceedings. I can't speak to the Migrant Protection Protocols specifically, because, again, unfortunately, there is pending litigation going on. But notice is required by our statute and by regulations and any cases that are filed with us, we make every effort to en-

sure that the respondents to get proper notice of whenever the next hearing is.

Mr. SERRANO. And are you—was your office consulted on this decision to keep people in Mexico? And by the way, is it speaking seeking asylum from Mexico or to anybody who made it to Mexico from any other place?

Mr. MCHENRY. The MPP is a Department of Homeland Security initiative, so I can't speak to it comprehensively. My understanding, at least based on how the statute is, it is individuals who are coming from a non-contiguous country, so, not from Mexico, who apply for asylum at a port of entry or at the border and then are allowed to wait or remain in Mexico until their cases are heard.

Mr. SERRANO. Were you consulted at all, your office consulted at all in putting this together?

Mr. MCHENRY. The Department of Homeland Security initiated the policy. It is their policy. Obviously, it impacts us, so we have coordinated in terms of understanding where the cases are going to be.

Mr. SERRANO. And let me ask you, is EOIR facilitating access? How is EOIR facilitating access to counsel for individuals awaiting adjudication of their asylum claims?

Mr. MCHENRY. Under this protocol or just in general?

Mr. SERRANO. Just in general.

Mr. MCHENRY. As I have indicated, our judges—if someone shows up who is unrepresented, the judges will explain the law to them. They will explain their rights to them, including the right to get counsel at no expense.

If they have a claim for asylum and they don't have representation, which is only about 20% of our cases, by regulation, the judge is required to discuss the claim with them and provide applications and information to them so that they can apply for asylum withholding or whatever protection they are seeking.

Mr. SERRANO. And on the one we were discussing before, is there a target time frame—there is a target time frame for adjudicating these cases and what is reasonable? What is a reasonable time?

Mr. MCHENRY. I'm not sure I follow. Which types of cases?

Mr. SERRANO. The Mexico issue, I'm sorry.

Mr. MCHENRY. Again, they may fall under our existing priorities, but the cases haven't actually started yet or been heard yet, so I am not sure how they are going to play out.

Mr. SERRANO. They haven't been assigned yet? They haven't started yet?

Mr. MCHENRY. The cases have been filed, but we haven't had the first hearing yet.

Mr. SERRANO. So, do you know how many judges have been assigned to these cases?

Mr. MCHENRY. They are assigned to courts. In terms of how many judges will be hearing them and particular dockets, I don't know.

ZERO TOLERANCE POLICY

Mr. SERRANO. Mr. Director, were you involved in any of the meetings either with others at the Department of Justice or the Department of Homeland Security where discussions of the family

separation policy were held and did you support the adoption of this policy?

Mr. MCHENRY. I actually testified a little bit on this last week. The Department did not have a family separation policy. The Attorney General, following upon a policy issued in 2017, which followed an executive order issued earlier that year, issued what's called a zero-tolerance policy, which is a prosecution policy that directed prosecutors at USAAs along the border to accept cases referred by the Department of Homeland Security for illegal entry. Because it is a prosecution policy, certainly, I was aware of it, but it is not something that we were directly involved in.

Mr. SERRANO. Yeah, but the policy, itself, resulted in the separations, so what was the involvement of your agency in it? I mean, look, we have many issues to discuss on immigration—we all know that—but I think even people who haven't spoken on this—and I am not putting words into anybody's mouth, especially my friends on the other side—no one likes children being separated from their parents.

This morning, we have a report that 471 parents were deported without their children. I mean that is something that we are not supposed to be doing. And, you know, again, I am not a lawyer, but I am wondering does that qualify that we kidnapped their children if we did that? You know, what did we do?

So, that cost of separation, and is there anything in place at your agency to try to be part of remedying whatever harm that has been done?

Mr. MCHENRY. Part of this is in litigation. It is still ongoing litigation, the Miss L case, and we certainly work with our litigators to provide them with any information that they may need in terms of the reunification efforts.

The zero-tolerance prosecution policy, itself, however, does not directly affect us. Individuals who are prosecuted under the policy, it does not prohibit them from applying for asylum or any sort of protection to stay here. So, we would get their cases, whether they are prosecuted or not.

Mr. SERRANO. Thank you.

Mr. Graves.

EOIR'S CASE BACKLOG

Mr. GRAVES. Thank you, Mr. Chairman.

Director, thank you for your time today. You have had a lot of questions thrown at you. I want to just make sure that we clear up a couple of comments from earlier. I know that Mrs. Meng made reference to and used the term “manufactured backlog”. In no way do I believe that she was insinuating that there are mistruths or anything like that. So, I will just clearly ask the question: Is the backlog that you have referenced today manufactured?

Mr. MCHENRY. Not in the sense of being artificially created.

Mr. GRAVES. In what way could it be manufactured?

Mr. MCHENRY. Sort of deliberately created or deliberately manufactured.

As I have indicated, the factors that affect it sort of changed in 2017 and it is been growing——

Mr. GRAVES. But it is accurate.

Mr. MCHENRY. It is growing.

Mr. GRAVES. It is accurate, though, 850,000 or so, as of today?

Mr. MCHENRY. Yes.

Mr. GRAVES. In your opinion, do you believe that the current apprehensions that we have heard about this year thus far, the number I wrote down here was 268,000 apprehensions in the first five months. Is that a manufactured number?

Mr. MCHENRY. I don't have any reason to dispute those statistics. We do follow DHS—

Mr. GRAVES. Secretary Nielsen indicated that we could be upwards of a million apprehensions this year. Do you believe that is a manufactured number?

Mr. MCHENRY. Again, I don't have any reason to dispute their statistics. We do try to track them fairly closely.

HUMAN TRAFFICKING

Mr. GRAVES. We have heard a lot about human trafficking. You referenced that, as well. Do you believe that is a manufactured crisis on the southern border?

Mr. MCHENRY. We do see trafficking cases in our courts and our judges, they have protocols—

Mr. GRAVES. So, it is real.

Mr. MCHENRY [continuing]. In terms of how to deal with—

Mr. GRAVES. So, these are not hypotheticals that people are making up to score some sort of political points?

Mr. MCHENRY. Again, I can't speak to—

Mr. GRAVES. Children are being trafficked.

Mr. MCHENRY. I can't speak to every single case, but we do see, sometimes, trafficking cases.

Mr. GRAVES. Do you believe that sex trafficking and sexual abuse is being manufactured on the southern border? Is that real?

Mr. MCHENRY. Again, I can't speak to every single situation, but I am aware that there are cases of sex trafficking.

EOIR'S CASE BACKLOG AND FY19 RESOURCE CONSTRAINTS

Mr. GRAVES. Mr. Crist had asked you some questions about what has been attributing to the backlog—850,000 or so now—and he had some really good questions. I thought he was very thorough. You kept using the term “external factors” and you did not really want to go past that.

Is it fair to say that one external factor is the increase of apprehensions on the border, which is a result of an increase of illegal activity on the southern border? Is that an external factor in your mind?

Mr. MCHENRY. Yes, that is one of the ones that we stated. There is increased immigration that does have downstream costs, because most of those apprehensions will eventually end up in our courts.

Mr. GRAVES. When you were putting together your budget that is being submitted—I know you don't want to talk about your budget for the next week or so—who submitted the budget? Was it something you reviewed and submitted to OMB or is it something OMB or Department of Homeland Security or Department of Justice did on your behalf?

Mr. MCHENRY. I actually don't know all the ins and outs of that process. The Department, I know, works with OMB, but the person who actually submits it, I don't know.

Mr. GRAVES. They are considering a budget that they have presented on your behalf and you haven't had a chance to review it yet; is that accurate?

Mr. MCHENRY. No, we review. We are involved with—

Mr. GRAVES. You, personally, are involved in that process?

Mr. MCHENRY. Myself and my administrative team and other people are involved.

Mr. GRAVES. Mr. Palazzo asked you about the 75 judges earlier. Regarding those 75 judges, he asked you if you had known it was going to be \$1.3 billion for the wall, if you had known there were not going to be additional investigators, would you have requested additional judges. Knowing that you won't answer that question, how do you determine how many judges you need? What are the metrics? Surely, you can answer that.

Mr. MCHENRY. We look at several things. There is, obviously, a limit to how many you can bring onboard at any one time, because we have to train them and we have to have locations for them. I mentioned one of our—

Mr. GRAVES. So, if there were zero dollars for additional border security, zero for additional investigators, do you anticipate that apprehensions would increase, thus, increasing the backlog, thus, increasing the need for judges; is that a fair and logical statement?

Mr. MCHENRY. I am not sure that I followed every part of the question, but if there are increased apprehensions, increased illegal immigration, we will likely see more cases.

Mr. GRAVES. So, is it sufficient to say that if you had additional judges, and less apprehensions—meaning more border security—the backlog might decrease?

Mr. MCHENRY. If new cases go down, the backlog will likely decrease. If the number of new cases being filed was the same as it was in 2015, the backlog would already be going down.

Mr. GRAVES. So, fewer apprehensions as a result of fewer illegal entries into our country or fewer illegal activities in our country with additional judges could reduce the backlog?

Mr. MCHENRY. A reduction in new-case filings by DHS would lead to a reduction in the backlog, potentially.

Mr. GRAVES. Thank you, Mr. Chairman. I know my time is expiring, but I just want to point out that this is a very comprehensive issue we deal with and Mr. Palazzo and I dealt with as conferees on the conference committee. I would hope that we would keep that in mind when the question was asked about judges making partisan decisions. It is really unfair coming from a partisan asking that question—I don't believe they do. I believe these judges are doing the best they can with the little they have under immense pressure and what I would refer to as a crisis and an emergency on the border. And I know that you might or might not agree with that statement, but it is certainly a challenge you deal with.

Thank you, Mr. Chairman.

Mr. SERRANO. Thank you.

Mr. Palazzo.

Mr. PALAZZO. Thank you, Mr. Chairman.

DOWNSTREAM COSTS TO EOIR ASSOCIATED WITH INCREASED ILLEGAL
BORDER CROSSINGS

You mentioned in your testimony, or I saw it somewhere, that there is downstream costs associated with not having the appropriate amount of judges. Can you elaborate on that, if you recall.

Mr. MCHENRY. The downstream costs are the effects of an increase in immigration. So, increases in immigration, increased apprehensions leads to increases in new cases. That means more cases that we have to deal with, more cases for our judges to adjudicate.

Mr. PALAZZO. And there is a tremendous amount of downstream costs to America, to states, cities, municipalities, based on just the sheer volumes of illegal immigrants that are also currently in our country and that are making their way to our country. So, I definitely agree with that.

I don't know how you would be able to answer this, but I am going to ask it: In your opinion, what is driving the surge at our southern border?

Mr. MCHENRY. I think the Department of Homeland Security would be in a better position than I am. I know they put forth several factors. But they have access to better data than I do.

Mr. PALAZZO. And I guess the reason I asked that is there seems to be no consequences showing up at our backdoor, knocking, saying, Hey, I am here for asylum or whatever, take me in. We can't detain them anymore, I guess, for an extended period of time because of a court ruling and they just disappear into our country.

And you know, we have 840,000 people waiting, I guess, part of the backlog, and, what did you say, 44 percent don't show up for various reasons because I think there is no consequences to breaking our nation's laws. That we are going to continue to see—we may see that 1-million-person number, if not greater. Just this last month, we have had over 70,000, which I believe is a record, at our southern border.

And I know Ms. Meng mentioned something. I am glad that she had an opportunity to go to the border, because if you see it firsthand and you talk to the professionals and you are objective, you see there is a crisis. I mean if 70,000 people are showing up at our southern border illegally—and that is only the ones that we are either catching them between the ports of entry or showing up at the ports of entry—it is what we are not catching. It is the other trafficking of drugs and criminal aliens and foreign nationals that may or may not want to do us harm which concerns me, and that is what concerns all of America.

And that is why, you know, I think we need to get—when we talk about securing our southern border that it needs to be an “all of the above” approach. It needs to be defensive barriers. We know defensive barriers work. Just go to San Diego and see a million-dollar community right next to where there used to be full of bodies and drugs and right on the other side is the Mexican border. And that wasn't that way in the 1980s; it was a war zone and San Diego residents will tell you that they absolutely work.

We keep talking about asylum a lot, and, honestly, I am a CAP by trade—I am not an attorney or an immigration attorney—but

can you tell me, historically, what constitutes an asylum request and, especially, with regard to our southern border, maybe not foreign countries, outside that.

ASYLUM APPLICANTS IN IMMIGRATION COURT

Mr. MCHENRY. Yeah. Under the law, under the statute, there are five bases to apply for asylum: race, religion, nationality, political opinion, and membership in a particular social group. The first four, I think, are fairly straightforward—race, religion, nationality, political opinion—that last one, that membership in a particular social group, there is not a definition either in the statute or the regulations and it has sort of been developed by case law along and along, and that is what leads to decisions or it is what has led to decisions regarding things like gang claims, domestic violence, things like that, because it is somewhat amorphous and somewhat hard to define. So, you do see more claims that try to fall under that rubric.

We don't break down specific types of claims to that level of granularity, so I can't say for certain what our data shows, but anecdotally, it does seem that we are seeing more of these types of claims especially in the past four or five years. We have certainly seen more litigation and more case law related to these types of claims than we have to any of the other four bases.

Mr. PALAZZO. And you said it is fact-based. You have to prove, you know, one through four, and number five may be not as easy to support, especially with people coming from South America, Central America. So, what support is that; is it just the testimony of the person seeking illegal entry or asylum into our country?

Mr. MCHENRY. Again, it can vary based on the specifics of each case. It could be based on as little as the testimony, but a typical case will have some documentation if it is affidavits or government documents. The judges also consider country reports from the State Department, various other organizations. So, there is typically a little bit more to it than just the testimony.

Mr. PALAZZO. Are they carrying that with them when they come through the border or are we re-investigating and researching it and having people on the ground back in, say, whether it is Honduras or Guatemala?

Mr. MCHENRY. Not working for Customs and Border Protection, I can't necessarily say what goes on at the actual border. But individuals who do end up in immigration proceedings, when they bring their claims, roughly 80 percent of them have attorneys, so their attorneys help them with the claim and determine what's the best evidence or the appropriate evidence to submit.

Mr. PALAZZO. What percentage of asylum-seekers are actually granted, I guess, asylum versus being rejected asylum and put in custody for removal?

Mr. MCHENRY. I can't speak to the second part about put in custody, because that is a DHS determination, but the denial, or I should say, the grant rates are between 16 and 20 percent.

Mr. PALAZZO. Sixteen to 20 percent—

Mr. MCHENRY. Are granted asylum.

Mr. PALAZZO [continuing]. Are granted asylum, OK.

Mr. Chairman, I yield back.

Thank you, Mr. McHenry.

Mr. SERRANO. Just one last question—of course, all members are welcome to submit questions for the record—do you know what percentages of the backlog are people entering the country without seeking asylum, without legal papers, the proper papers, undocumented, and what percentage may be people who overstay their visa?

VISA OVERSTAYS CASELOAD

Mr. MCHENRY. We can—we don't track that. Normally, we could triangulate it to some extent based on the information that we get from the Department of Homeland Security, but I don't have that statistics with me.

Mr. SERRANO. Because there is a strong feeling out in various communities and in government, too, that the larger number of people who are considered undocumented or illegals or people who overstayed their visa, not people who entered without documentation; do you know that to be the case or—

Mr. MCHENRY. I don't have the specific numbers. We do know that visa overstays are a significant part of our caseload and I believe we have a report that we submit to the subcommittee on that, but I don't have those specific numbers with me.

Mr. SERRANO. Well, thank you. Thank you for your testimony today. You took some very tough questions and you faced up to them. It does not mean we agree with your answers, but, also, very strong on asking questions. And I just have a personal note, you know, we should, every so often, when we deal with this immigration issue, put ourselves in the shoes of those people in those countries and what they are going through. And, you know, I once either sarcastically or very profoundly, said if you don't want an immigration problem—because I call it an immigration issue, so I don't call it a problem—then don't advertise.

We tell the world that we are the greatest country, and we are. We tell the world that we have the greatest economy, and we do. We tell the world we are the greatest military, and we have it. We tell the world that we are the land of opportunity, and then we are amazed that people would come here and, you know, there is something inconsistent with that.

So, how do we resolve the immigration issue? Many ways. Maybe one of them is not trying to make the whole world think that we are the greatest on earth—which we are, for the record; I don't want to get a Tweet saying that I hate my country—this is the greatest country, but that is why we have immigration issues.

Thank you so much, and thank you to the panel.

Thank you, Mr. Aderholt.

Mr. ADERHOLT. Thank you.

Mr. MCHENRY. Thank you, Mr. Chairman.

Mr. SERRANO. This hearing is adjourned.

The Honorable José E. Serrano
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

Immigration Judge Hiring

1. You have recently streamlined the hiring process for immigration judges. While I fully support adding judges and reducing the backlog, I am concerned that we are not getting fair and impartial judges. **Of the Judges hired under the new streamlined process, what percentage are former attorneys of the Department of Homeland Security? What percentage are from public interest law or private immigration practice?**

ANSWER: The Executive Office for Immigration Review (EOIR) does not currently track prior vocational experiences of immigration judges (“IJ” or “IJs”), and most IJs previously worked for multiple legal employers. The professional biographies of IJs hired since 2013 are available on EOIR’s website.

2. **When the current Administration began, were there any outstanding job offers for Immigration Judges from the previous Administration? Were any of these offers withdrawn? If so, how many?**

ANSWER: Sixty-three individuals who were made tentative offers of a position as an immigration judge prior to January 20, 2017, received an appointment and entered on duty after that date. Eight tentative offers of a position as an IJ made prior to January 20, 2017, were rescinded subsequent to that date. Six tentative offers of a position as an IJ made after January 20, 2017, have also been rescinded.

Varick Street Courthouse

3. I have a great deal of concern about what is happening at the Immigration Court in Manhattan. As I understand it, all ICE detainees are unable to access the Varick Street courthouse and are being forced to conduct their immigration proceedings over video teleconference. **Who made the decision to implement this arrangement? Was it ICE or EOIR? Is this a temporary arrangement? Or do you expect it to continue indefinitely?**

ANSWER: The use of video conferencing for detained cases at the Varick Street Immigration Court is currently the subject of active litigation, and it would be inappropriate to comment further while that litigation is pending.

4. **Can I get a commitment from you to work with ICE to try and get this resolved so that in-person hearings can continue?**

ANSWER: As the Department of Homeland Security (DHS) maintains responsibility for security and logistics in its detention space where immigration courts are located, EOIR respectfully defers to DHS regarding any future plans for detained hearings at the Varick Street facility. Otherwise, as this issue remains in active litigation, it would be inappropriate to comment further.

5. **My understanding is that New York's immigration courts previously had dedicated juvenile dockets with dedicated judges. This allowed city agencies to assist with obtaining counsel and providing health and educational resources for unaccompanied minors. The current ad hoc system makes it difficult to coordinate services- why was the change made?**

ANSWER: EOIR does not have an ad hoc system for juvenile cases. Juvenile dockets are consolidated so that all cases are heard on consecutive days at the end of the month. This scheduling format ensures that all juvenile cases are heard on a consistent, repeatable schedule, which should better enable city agencies, pro bono providers, and other interested parties in their planning and provision of services. The immigration courts in New York City continue to have dedicated juvenile dockets with dedicated IJs who consistently hear cases on the juvenile dockets.

Family Separation

6. Previous Administrations had proposed funding for the hiring of attorneys to represent unaccompanied minor children in immigration proceedings. At the time, I believe the proposal was widely supported by immigration attorneys and judges. **Does EOIR have an objection to the Congress funding such a program?**

ANSWER: Such funding may be inconsistent with Section 292 of the Immigration and Nationality Act, which makes it clear that aliens in removal hearings are not entitled to Government-funded attorney representation. Further, there may be potential questions that the agency would need to explore further regarding the propriety of EOIR funding both the immigration judge and a representative of a party to the same proceeding over which the judge is presiding. We note, however, that approximately two-thirds of all unaccompanied alien child (UAC) cases in immigration proceedings have representation, and nearly eighty percent of UAC cases pending for over one year have representation. Additionally, eighty-five percent of asylum cases have representation. Otherwise, the issue of whether UAC should be provided representation at government expense remains in active litigation, and it would be inappropriate to comment further.

2019 Shutdown Impacts

7. **What is the plan for ensuring all respondents receive notifications of the changes of venue they sought before the shutdown took effect, including new hearing dates, and other changes to their hearings?**

ANSWER: Immigration courts provide notice to both parties in accordance with applicable law regarding any changes of venue or rescheduling of hearings.

8. **What will the courts do to ensure there are not unnecessary orders of removal in absentia because of the lack of coordination?**

ANSWER: The requirements for the issuance of an *in absentia* order of removal are established by the Immigration and Nationality Act. Immigration judges determine whether the issuance of an *in absentia* removal order is appropriate based on the applicable law and the facts of each individual case.

Docket Adjustments

9. Under both this Administration and the previous one, the docket has been re-shuffled. **Has EOIR performed an analysis of the impact these reshufflings have had on the backlog and case completion numbers?**

ANSWER: EOIR has not performed a quantitative analysis regarding the broad docket reshuffling that occurred under the prior Administration, though there is strong qualitative evidence that it contributed to increased case processing times and decreased case completions. EOIR has not had a policy of docket reshuffling under the current Administration. Instead, EOIR has prioritized cases as appropriate, targeted certain categories of cases for expedited completion consistent with expectations under the law, and generally emphasized the importance of completing all cases in a timely manner consistent with due process. As a result, EOIR has completed 161,981 cases so far in FY 2019 as of May 31, which is more than it completed for the entire year in each of FYs 2013, 2014, 2015, and 2016, and it is already the third-highest single-year case completion total in the agency's history.

Space Requirements

10. **What are your plans to acquire new space in fiscal year 2020? Are you looking at GSA or other options?**

ANSWER: For non-detained courtrooms, EOIR is currently planning to open 17 new courtrooms before the end of FY 2019. In FY 2020, EOIR is on schedule to open 47 additional courtrooms with another 34 scheduled for early FY 2021. EOIR is working

closely with the General Services Administration (GSA) to expand current space as well as to pursue new space in both federal buildings and leased locations. For detained courtrooms, EOIR is dependent on DHS for any space expansion in detention facilities.

11. **What is the total square footage that needs to be acquired to accommodate all planned EOIR judges and staff, and does EOIR have a long-term facilities plan to accomplish this? If not, is one being developed?**

ANSWER: Incorporated within the budget request for each IJ and supporting staff is the funding necessary to acquire the necessary space for those employees. At this time, EOIR does not have additional vacant space. The Consolidated Appropriations Act, 2019, P.L. 116-6, provided funding to hire 534 IJs and the agency has requested an additional 100 IJs in the FY 2020 President's Budget for a total of 634 IJs. Counting the courtrooms referenced above and current courtrooms, EOIR expects to have 526 courtrooms available by the end of FY 2020. EOIR also has been working with GSA on long-range planning to acquire an additional 108 courtrooms in FY 2021, which would bring the total number of courtrooms to 634, consistent with the FY 2020 President's Budget.

The Honorable Grace Meng
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

Issuance of Notice to Appear (NTA) Containing Fake Hearing Dates

1. Following the Supreme Court's decision in *Pereira v. Sessions*, which said that all NTAs in immigration court must include a date, time, and location, EOIR knowingly began to provide DHS components with artificial hearing dates to circumvent these requirements. Hundreds of immigrants on October 31, 2018 and over a thousand immigrants on January 31, 2019 showed up to immigration courts nationwide with NTAs containing fake hearing dates. **What steps have been taken to remedy incorrect NTAs and to provide proper notice to affected individuals? What is the current status of such cases?**

ANSWER: The initiation of removal proceedings generally involves two steps. First, a component of the Department of Homeland Security (DHS) (*i.e.*, U.S. Customs and Border Protection (CBP), U.S. Citizenship and Immigration Services (USCIS), or U.S. Immigration and Customs Enforcement (ICE)) serves an individual with a Notice to Appear (NTA) alleging that person's removability from the United States. Second, DHS files that NTA with an immigration court. Jurisdiction with the court does not vest until the NTA is filed pursuant to 8 C.F.R. § 1003.14(a). Consequently, although DHS may serve the NTA to an individual with a time and date for a hearing on it, the immigration court does not actually acquire jurisdiction—and, thus, the case is not actually “scheduled” and no record of proceedings exists—until DHS files the NTA with the court. Accordingly, although an individual may believe that his or her case has been scheduled for a hearing at the time and date indicated on the NTA and may appear for that hearing, that hearing cannot occur if the NTA has not also been filed with the immigration court.

Prior to the Supreme Court's decision in *Pereira v. Sessions*, 138 S. Ct. 2105 (2018), most—though not all—NTAs issued by DHS for aliens not in DHS custody did not specify the time and date of the initial hearing. In cases where the NTA did not specify the time and date of the initial hearing, the Executive Office for Immigration Review (EOIR) would schedule the initial hearing after the NTA was filed and serve notice of the hearing on both parties, typically by mail. Although most NTAs did not specify the time and date of the initial hearing, DHS did specify it for some cases based on dates provided through EOIR's Interactive Scheduling System (ISS). In those cases, DHS would specify the date, serve the alien, and then later file the NTA. If the NTA were filed prior to the date of the scheduled hearing, EOIR would process the NTA and either go forward with the hearing as scheduled or reschedule the case and issue another hearing notice which would be served on both parties. If the NTA was not filed prior to the scheduled hearing date, the case would not proceed and would be classified as a “failure to prosecute.” Only a limited number of DHS employees had access to ISS to avoid any instances of docket manipulation or overload. In *Pereira*, the Supreme Court held that an NTA which did not specify the time and date of the initial hearing was not an NTA that would stop the accrual of continuous physical presence for purposes of a particular application for relief. Consequently, DHS determined that it should specify the time and date of the initial hearing for all NTAs, which required expanding their access to ISS. Expanding this access and updating ISS takes time, so in the interim, EOIR provided dates directly to DHS to use on the NTAs. Some of those NTAs,

however, were not filed with the court in time to be processed in advance of the hearing date, leading to confusion. The hearing dates were not fake, but the cases could not proceed because the necessary documents were not timely filed with the immigration courts.

On December 21, 2018, EOIR announced that it would no longer provide dates directly to DHS after January 31, 2019, and that DHS should use ISS if it intended to specify the time and date of the initial hearing on the NTA. EOIR was prepared to address the dockets set for January 31 based on DHS filings and to process or reschedule cases as needed, with sufficient time to notify respondents of any changes in the hearing date; however, EOIR could not work on non-detained cases during the government shutdown that ran until January 25. Reopening on January 28—combined with weather closures and delays that week—did not provide it with enough time to process the new cases filed by DHS or to mail new notices of hearing to reach respondents with hearings scheduled for January 31.

Going forward, DHS is expected to use ISS, allowing EOIR to know ahead of time which cases have been scheduled and to plan accordingly, including by sending out notices of any rescheduled cases in advance of the hearing date. Thus, EOIR does not expect any reoccurrences of this situation.

2. **What is being done to prevent the re-occurrence of this situation, which poses significant hardships for immigrants and their legal cases?**

ANSWER: Please see the answer to Question 1.

3. **How many cases has DOJ identified to have been affected by the issuance of NTAs containing “fake” hearing dates?**

ANSWER: Please see the answer to Question 1. Because the hearing dates were not “fake,” EOIR has not tracked these cases as an identifiable cohort. Any case in which DHS does not timely file the Notice to Appear is handled in accordance with EOIR Policy Memorandum (PM) 19-08, available at <https://www.justice.gov/eoir/file/1122771/download>

4. I am hearing from immigration attorneys that March 4th, just 3 days ago, was a dummy date given to people to report to immigration court in Kansas City. People that live 7-8 hours away reported to court with their children, but were told that their NTAs weren't on file with the court. **Are dummy hearing dates still being issued?**

ANSWER: EOIR is no longer providing dates to DHS for initial hearings for non-detained cases in accordance with PM 19-08. As further outlined in PM 19-08, attorneys for respondents who have been served a Notice to Appear with a specified hearing date are encouraged to contact EOIR or DHS prior to that date if no information is found in EOIR's Automated Case Hotline about the hearing. EOIR respectfully defers to DHS for any additional information regarding dates that DHS places on Notices to Appear.

Migration Protection Protocols (MPP), also known as the Remain in Mexico (RIM) Plan

5. On February 25th, AP News reported that 112 people had been subject to the Migration Protection Protocols (MPP), otherwise known as the Remain in Mexico (RIM) plan, which requires asylum seekers to remain in Mexico as they await the adjudication of their asylum application. **How is EOIR facilitating access to counsel for individuals awaiting adjudication of their asylum claims?**

ANSWER: EOIR adheres to the relevant law regarding counsel in immigration proceedings, including the provision of an advisal of the right to counsel at no expense to the government to all aliens in proceedings. Otherwise, the MPP program is currently the subject of active litigation, and it would be inappropriate to comment further on MPP while that litigation is pending.

6. **Have individuals subjected to this plan been provided with Notices to Appear (NTA) that comply with notice requirements affirmed by the Supreme Court in *Pereira*? That is, do the NTA's have the exact date, time, and location that the individual's court hearing is scheduled for?**

ANSWER: Both the MPP program and the scope of the Supreme Court's decision in *Pereira* are in ongoing litigation. Accordingly, it would be inappropriate to comment further on either issue.

7. **Has EOIR establish a target timeframe for these adjudications? What timeframe does EOIR consider reasonable for these cases?**

ANSWER: EOIR's case processing goals for all cases are available at <https://www.justice.gov/eoir/page/file/1026721/download>

8. **How many immigration judges will be assigned to hear MPP cases? Where will these judges be located?**

ANSWER: MPP cases are currently being heard at the immigration courts in San Diego and El Paso. Any immigration judge at those courts may hear MPP cases.

9. **Has EOIR determined how much the implementation of this program will cost the agency?**

ANSWER: There is no apparent cost to EOIR associated with MPP, as the aliens subject to MPP would have been placed in EOIR proceedings even if MPP had not been implemented.

**The Honorable Marcy Kaptur
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record**

1. I represent Cleveland, which has an immigration court. There is a vacant position for a chief immigration judge and as a result, it makes it much more difficult for the local advocacy community to communicate with the court. **What are your intentions to fill the chief judge position in Cleveland?**

ANSWER: The Assistant Chief Immigration Judge for Cleveland entered on duty April 15, 2019, and will work at the Cleveland Immigration Court once he completes training.

2. With the court docket backlog doubling since 2014 at the Cleveland Immigration Court, and growing from 5,000 to 10,000, I am particularly worried about the slowness in filling additional immigration judge positions. **When will the sixth position in Cleveland be filled?**

ANSWER: The sixth immigration judge entered on duty April 15, 2019, and will work at the Cleveland Immigration Court once she completes training.

3. I am concerned about staffing of the Legal Orientation Program. Underfunding access programs appears an intentional effort to starve communities that rely on LOP for claimants to navigate the court system. With the hundreds of thousands of cases backlogged, the legal education programs are crucial for efficient operating of the program. **Is understaffing of the Office of Legal Access Programs an intentional effort to starve the courts and our communities of needed resources to facilitate faster removal of people that have viable immigration claims?**

ANSWER: EOIR staffing decisions are based on operational need and not on any issues listed in the question.

4. Even though there are open positions, EOIR is refusing to backfill open positions with the legal access program. The legal access programs make the courts work and run more efficiency. When claimants understand the basic rules of the road, there is less need for continuances and more chance that the law will be upheld. **How have staff levels in legal access programs shifted over the last two years? What are your plans to backfill positions that are currently open due to attrition?**

ANSWER: Staffing levels in the Executive Office for Immigration Review (EOIR) Office of Legal Access Programs (OLAP) have not shifted appreciably since FY 2017 and were sufficient to allow one of its attorneys to detail to another agency from 2017 to 2018. EOIR has multiple vacancies across all of its offices, including the Office of the Chief Immigration

Judge, the Board of Immigration Appeals, the Office of the General Counsel, the Office of Administration, and OLAP, and those positions will be filled according to operational need.

5. While the agency has taken an aggressive approach to filling honors attorney positions at EOIR, you have not attempted to fill positions at the Office of Legal Access Programs. **Is this a deliberate attempt to starve legal access of needed staffing to ensure litigants cannot adequately exercise their rights?**

ANSWER: Please see the answer to Question 3. Additionally, immigration judges ensure that due process and the rights of respondents are respected in all immigration proceedings.

6. **With the elimination of the Assistant Chief Immigration Judge position that investigated and took action on reports of temperament concerns with Immigration Judges, who is investigating these concerns and what is the process?**

ANSWER: EOIR's process for handling complaints against its adjudicators is available at <https://www.justice.gov/eoir/page/file/1100946/download>

7. In recent postings for OCAHO positions, EOIR indicated that it plans to utilize OCAHO judges for trial level cases with expertise in Immigration and removal proceedings outside the scope of their position as an OCAHO judge. Specifically, the posting said: "In addition to performing the duties described above, the ALJ is also qualified to conduct, and may be assigned to conduct the following proceedings as an immigration judge: removal, discretionary relief, rescission of adjustment status, claims of persecution, stays of removal, and bond and detention. In accordance with section 101(b)(4) of the Immigration and Nationality Act (Act), the incumbent is an attorney appointed by the Attorney General as an administrative judge who is qualified to conduct specified classes of proceedings, including removal proceedings under section 240 of the Act, and to preside at formal, quasi-judicial hearings to determine the issues arising in exclusion, deportation, and related proceedings. As such, the ALJ must have expert knowledge in immigration and employment law, including the relevant statutes and regulations, precedential decisions of the Board of Immigration Appeals, and decisions of Circuit Courts."

The statute envisions that ALJs at OCAHO focus in employment law. This type of cross posting has the potential for muddying the waters of your applicant pool and sending the wrong message to applicants about the priorities in filling positions for impartial subject matter experts. **When evaluating these open positions based on such an ambiguous job posting, does the administration prioritize asylum and removal proceedings or substantive employment law experience?**

ANSWER: An Office of the Chief Administrative Hearing Officer (OCAHO) Administrative Law Judge (ALJ), if appointed, is authorized by regulation to hear cases as a temporary immigration judge or a temporary member of the Board of Immigration Appeals, and an OCAHO ALJ has previously served as a temporary Board member. Consequently, an OCAHO ALJ presiding over removal proceedings is neither unusual nor beyond the scope of

the position. Beyond the minimum qualifications for an OCAHO ALJ position, EOIR prioritizes the seven Quality Ranking Factors listed below in evaluating applicants:

1. Ability to demonstrate the appropriate temperament to serve as a judge.
 2. Knowledge of immigration law, immigration-related illegal hiring and employment eligibility verification, employment discrimination, and/or labor law.
 3. Proven ability to manage cases, preferably in a high volume context.
 4. Experience managing a significant active caseload and the ability to render clear, thorough, and precise written decisions.
 5. Experience handling complex legal issues and/or complex litigation.
 6. Experience conducting administrative hearings.
 7. Knowledge of judicial practices and procedures, including the Federal Rules of Civil Procedure and the Federal Rules of Evidence.
8. In recent postings for BIA positions, EOIR indicated that it plans to utilize BIA judges for trial level cases that are normally outside the scope of their position as appellate judges. Specifically, the posting said “Although the majority of the Board Members’ time concerns hearing appeals, the incumbent is also qualified to conduct and may be assigned to conduct proceedings in the first instance as an immigration judge.” As an appellate judge, these types of cross postings present significant conflict of interest concerns. It also raises significant concerns about efforts simply to reassign BIA judges to a trial court if the Director is dissatisfied with the outcome of the decisions without regard to the quality of the legal analysis. **When evaluating BIA openings, does EOIR prioritize appellate or trial experience for these types of cross posted positions?**

ANSWER: Beyond the minimum qualifications for a Board member position, EOIR prioritizes the seven Quality Ranking Factors listed below in evaluating applicants:

1. Ability to demonstrate the appropriate temperament to serve as a Board Member.
 2. Knowledge of immigration laws and procedures.
 3. Proven ability to manage cases, preferably in a high volume context.
 4. Experience handling complex legal issues.
 5. Experience conducting administrative hearings, including proven ability or potential to serve as an effective decision-maker.
 6. Knowledge of judicial practices and procedures.
 7. Excellent analytical, decision-making, and writing abilities.
9. **What steps has EOIR taken to ensure cross posted positions avoid conflicts of interest. Also outline steps BIA has taken to prevent judges being assigned to Immigration Judge dockets as retribution for opinions EOIR leadership disagrees with?**

ANSWER: All EOIR adjudicators are expected to abide by all applicable laws, Department of Justice policies, and EOIR’s Ethics and Professionalism Policies to avoid any conflicts of interest in adjudicating cases.

All Board members are appointed by the Attorney General and may hear immigration cases at the trial level, just as federal appellate judges may hear cases at the district court level. All Board members will be expected to hear cases at the immigration court level, and assignments will be made solely based on operational needs. EOIR unequivocally does not assign work as “retribution.”

The Honorable Robert Aderholt
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

Performance Metrics

1. In October of 2018, EOIR implemented performance-based metrics as one additional component of a multidimensional performance review of immigration judges. In addition to the 700-case completion goal, there are other benchmarks to ensure timely decision issuance, timely motions adjudication, and a low remand rate. **Do you believe these performance metrics will have an impact on the current backlog?**

ANSWER: Yes. EOIR has already completed more cases through the first eight months of FY 2019—the first year that the measures have been in effect—than it completed for the entire year in each of FY 2013, 2014, 2015, and 2016, though the pending caseload continues to grow due to record numbers of new case filings by the Department of Homeland Security driven by continued influxes of illegal immigration. In conjunction with EOIR’s efforts to expand its adjudicatory capacity by hiring more immigration judges, however, these measures will ensure that productivity remains at a high enough level to address the backlog.

2. **These performance-based metrics don’t tell immigration judges how to rule on any particular case, correct? What do you say then to those who claim the metrics are “quotas” that will undermine decisional independence of immigration judges?**

ANSWER: The performance measures are not based on case outcomes and do not dictate how to rule in individual cases. The measures are not quotas. Quotas are typically fixed with no room for deviation, whereas in evaluating immigration judge performance with respect to the measures, the Executive Office for Immigration Review (EOIR) will take into account six discrete factors, plus a seventh catch-all factor, that may affect the judge’s ability to meet the measures and may account for any deviations.

Performance measures are neither novel nor unique to EOIR, almost every federal administrative adjudicatory body uses them, and federal courts have upheld similar measures on multiple occasions. Further, effective performance management involves cascading organizational goals from the organizational level down to the employees who accomplish the work to advance those goals. To that end, EOIR adjudicators have operated for years under statutory or regulatory deadlines for the completion of certain types of cases, including under deadlines set by the Immigration and Nationality Act (INA), the Government Performance and Results Act (GPRA) of 1993, and the GPRA Modernization Act of 2010. Historically, EOIR also utilized case completion measures for non-detained cases from FY 2002 to FY 2009. It eliminated those measures in FY 2010, leading to criticism by both the DOJ Office of Inspector General and the Government Accountability Office, both of whom recommended that EOIR reinstate goals for the completion of non-detained cases. In 2016 and 2017, the House Committee on Appropriations also directed EOIR to establish goals for the median length of adjudication of detained and non-detained cases. The performance measures represent the role of the immigration judges in meeting those goals. In short, the

use of performance measures at EOIR is not new, it reflects a broad consensus that such measures are a necessary accountability tool to ensure that a court is operating at peak efficiency, and it ensures that EOIR will fulfill its mission and adjudicate cases in service to the national interest.

Further, as a report prepared for the Administrative Conference of the United States (ACUS), an independent federal agency charged with convening expert representatives from the public and private sectors to recommend improvements to administrative process and procedure, has recognized, “case-processing goals can improve productivity and accountability.” All but 68 of 10,831 reported non-ALJ administrative adjudicators in the federal government are subject to performance appraisals; moreover, 81 percent of non-ALJ types in the federal government that receive performance appraisals are subject to case-processing goals, just as immigration judges are. EOIR’s other adjudicatory components, the BIA and OCAHO, are already subject to case processing goals and have been for several years. Even agencies which employ ALJs, such as the Social Security Administration, have utilized case processing metrics for over forty years which have been repeatedly upheld by multiple circuit courts of appeals. In short, performance measures like those for immigration judges are a common and effective tool for ensuring that administrative adjudicators render decisions in an expeditious manner consistent with due process.

3. What was the average completion rate prior to the implementation of the metrics?

ANSWER: EOIR has hired 193 immigration judges (IJs) since January 20, 2017, and has also expanded its corps of supervisory IJs. New immigration judges take time to build up efficiency completing cases, and supervisory IJs are not subject to the case completion goal. Consequently, EOIR has not tracked an average completion rate per IJ because the denominator fluctuates considerably depending on when the average is calculated. In June 2017, however, the Government Accountability Office (GAO) found that the average completion rate fell from 1,356 completions per IJ in FY 2006 to 807 per IJ in FY 2015.

4. How was the number 700 determined?

ANSWER: Like all of the performance measures, the case completion measure reflects a considered policy judgment regarding the efficiency that an experienced immigration judge working a regular schedule should reasonably be able to achieve. Similar measures are used for administrative adjudicators at other agencies, and the immigration courts themselves have operated under case completion goals for years. The immigration judge union determined in FY 2010 that an average immigration judge completed 1,500 cases per year. The GAO found that an average immigration judge in FY 2015 completed 807 cases per year. Consequently, the more modest 700 case completion performance measure is also in line with historical norms. More recently, in March 2019, the American Bar Association reaffirmed its recommendation that immigration judges should manage a caseload “roughly on par with the number of cases decided each year by judges in other federal administrative adjudicatory systems (around 700 cases annually).”

5. **What happens if an immigration judge does not meet that 700-case goal?**

ANSWER: The collective bargaining agreement (CBA) between EOIR and the immigration judge union calls for the consideration of six discrete factors, plus a seventh catch-all factor, that may affect a judge's ability to meet the performance measures, including the 700-case goal. EOIR will comply with all of its obligations under the CBA before assigning a performance rating to an IJ based on the measures.

TUESDAY, MARCH 12, 2019.

**OVERSIGHT OF THE DEPARTMENT OF JUSTICE CIVIL
RIGHTS DIVISION**

WITNESS

ERIC DREIBAND, ASSISTANT ATTORNEY GENERAL, CIVIL RIGHTS DIVISION, U.S. DEPARTMENT OF JUSTICE

Mr. SERRANO. Good morning. The subcommittee will come to order.

Today we are meeting with Eric Dreiband, the Assistant Attorney General for the Civil Rights Division in the Department of Justice.

In addition to his work in the private sector, Mr. Dreiband has served in several positions over the years throughout our Federal Government, including as the General Counsel of the Equal Employment Opportunity Commission from 2003 to 2005, and as Deputy Administrator of the Department of Labor's Wage and Hour Division. And we welcome you, sir.

Mr. DREIBAND. Thank you.

Mr. SERRANO. For more than 60 years, the Civil Rights Division at the Department of Justice has been a shining example to our Nation as a force for marginalized communities, protecting their basic rights, and ensure justice for all communities.

In communities of color, the Civil Rights Division holds a place of reverence that is well earned through a record of achievement. The mission of the Division is essential to ensuring that all Americans receive equal protection under the law.

Sadly, that proud record of service is imperiled under this administration. The attacks on longstanding precedents and effective policies have been unending. From preventing the use of consent decrees in addressing systemic issues with local law enforcement, to a lack of enforcement of the Voting Rights Act, to rescinding guidance protecting transgender students, the Department has pulled back on policies that have protected millions.

The Department has also chosen to change sides on cases involving cornerstone civil rights issues like affirmative action and discriminatory voting laws.

Earlier this year, the Washington Post reported that the Justice Department had been tasked with analyzing current disparate impact guidance and policies, any revision of which could severely undermine our Fair Housing laws. The pace of these changes is dizzying and disturbing; many of them undermine the core mission of the Civil Rights Division.

Last month, in what can only be described a Freudian slip, the President praised the quote, "abolition of civil rights," end of quote. Unfortunately, that statement hits far too close to the truth. This

subcommittee intends to look at the work of the Civil Rights Division very carefully and we expect that the dollars we appropriate to the Department will be used in a manner that protects the vulnerable communities the Division has stood up on behalf of for many decades.

Once again, we welcome you, Assistant Attorney General Dreiband, and we look forward to your testimony.

Before I proceed, let me just say that my comment before really was sincerely spoken. Growing up politically, and growing up physically, but certain politically, the Justice Department was that place that you looked to for fairness and for coming in, basically, and straightening things out when they were being unfair. That is why a lot of us are sad at what we think is happening in the Justice Department and especially in this Division.

Mr. Aderholt.

Mr. ADERHOLT. Thank you, Mr. Chairman.

And welcome, Mr. Dreiband, good to have you here today. And we are especially glad to have you here to discuss this important issue, really fundamental issue of the Civil Rights Division of the United States Department of Justice.

This Division of the Department of Justice has the solemn responsibility, as you know, of ensuring that civil and constitutional rights of all Americans, particularly some of the most vulnerable members of our society, are upheld. I commend you and your team for your steadfast efforts to protect the rights of all individuals to live free of violence, discrimination, and exploitation; to safeguard the fundamental infrastructure of democracy; and ensure that all have an equal opportunity to learn, earn a living, live where we choose, and worship freely.

I have a particular interest in enforcement of the federal statutes prohibiting discrimination on the basis of religion. Religious freedom has been a core American principle since the foundation of this Nation. For this reason and for others I wish to commend the Civil Rights Division, the United States Attorneys, as well as your federal enforcement partners for your successful prosecution of the horrific, heartbreaking attack on the African-American worshippers at Emanuel African Methodist Episcopal Church in Charleston, South Carolina, as both a vile hate crime and abhorrent assault on the free exercise of religion.

In addition to religious liberty, and the fundamental rights of due process and equal protection under the law, I look forward to discussing the Division's extensive efforts to safeguard the integrity of our elections, and also address the scourge of human trafficking, among other vital pursuits.

Again, I thank the Chairman for holding this very important hearing, and I yield back.

Mr. SERRANO. Thank you.

Please try to keep, Mr. Dreiband, your comments to 5 minutes, but we assure you that your full testimony will be inserted in the record.

Mr. DREIBAND. Thank you, Chairman Serrano and Ranking Member Aderholt, and members of the committee, for the opportunity to speak with you today. It is an honor to serve as the Assistant Attorney General, and as the voice of the women and men

of the Civil Rights Division at the United States Department of Justice. Thank you also for making time today for this important hearing.

As you know, the Civil Rights Division works to uphold the civil and constitutional rights of all, including some of our most vulnerable members of our society. We enforce several civil and criminal statutes, including the Civil Rights Act of 1964, the Voting Rights Act, the Americans with Disabilities Act, the Fair Housing Act, and the Shepard-Byrd Hate Crimes Prevention Act, among others.

The Division currently has approximately 567 full-time employees, including 369 attorneys. The Division's fiscal year allocation from the General Legal Activities Account is \$148.2 million.

The Civil Rights Division remains focused on a variety of priorities; these include prosecuting hate crimes; prosecuting human traffickers and destroying transnational organized trafficking networks; prosecuting those who violate federal race discrimination laws; combating unlawful hiring practice against U.S. workers; enforcing federal laws to protect servicemembers, veterans, and their families; protecting voting rights; safeguarding religious freedom; ensuring that individuals have access to treatment for opioid addiction and are free from discrimination; combating sexual harassment and abuse.

The Attorney General has made hate crimes prosecutions a priority, and the Department launched a Hate Crimes Enforcement and Prevention initiative. The Civil Rights Division leads that initiative, and coordinates the Department's efforts to eradicate hate crime. Since January of 2017, the Department has convicted more than 40 defendants for hate crimes violations.

The Division also plays a lead role in the Department's efforts to enforce laws against human trafficking, including both sex trafficking and forced labor. From 2013 to 2017, the Division, in partnership with U.S. Attorney's Offices around the country, brought 427 human trafficking cases, which is an 82-percent increase from the prior 4-year period.

The Division has also launched several other initiatives. The Protecting U.S. Workers Initiative seeks to identify employers who abuse temporary visa programs, and combats employment discrimination against U.S. workers. The Division's Americans with Disabilities Act Voting initiative seeks to ensure that people with disabilities have an equal opportunity to participate in the voting process. The Division entered into its most recent settlement agreement under this initiative just 2 weeks ago.

The Division has also zealously protected the right to vote under other federal statutes, including the Voting Rights Act, the Uniformed and Overseas Absentee Voting Act, the National Voter Registration Act, and the Help America Vote Act.

Since January of 2017, the United States has participated in six cases brought under Section 2 of the Voting Rights Act. The federal appellate courts resolved three of those cases, and in each case the courts adopt the position adopted by the Justice Department; the other three cases remain pending.

And since January 2017, the Civil Rights Division has entered into settlement agreements with Arizona and Wisconsin to protect the voting rights of military and other overseas voters; and with

Kentucky and Connecticut to ensure compliance with Federal law requirements regarding the maintenance of complete and accurate voter registration rolls.

In April 2018, in time to coincide with the 50th anniversary of the Fair Housing Act, the Division launched the Sexual Harassment in Housing Initiative. The Division has opened a record number of investigations and filed a record number of sexual harassment pattern or practice lawsuits in Federal court.

The Division's Religious Discrimination initiative works with U.S. Attorney's Offices to combat religious discrimination in schools, and the Place to Worship Initiative seeks to increase enforcement and public awareness of the land use provisions of the Religious Land Use and Institutionalized Persons Act.

Finally, last year, the Division and the Department commemorated the 50th anniversary of the tragic assassination of Dr. Martin Luther King. Every section of the Civil Rights Division plays a role in seeking to make Dr. King's vision of a nation free from racial prejudice a reality, and the Division is committed to continue its efforts to eliminate race discrimination in this country.

Chairman Serrano, Ranking Member Aderholt, and members of the committee, your support allows the Civil Rights Division to protect the civil rights of all Americans.

Thank you, and I look forward to your questions.

[The information follows:]



STATEMENT OF

ERIC S. DREIBAND
ASSISTANT ATTORNEY GENERAL
CIVIL RIGHTS DIVISION
UNITED STATES DEPARTMENT OF JUSTICE

BEFORE THE

COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND
RELATED AGENCIES
UNITED STATES HOUSE OF REPRESENTATIVES

FOR A HEARING ENTITLED

"CIVIL RIGHTS DIVISION OVERSIGHT"

PRESENTED ON

MARCH 12, 2019

**ERIC S. DREIBAND
ASSISTANT ATTORNEY GENERAL
CIVIL RIGHTS DIVISION**

**BEFORE THE
HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE AND RELATED
AGENCIES**

MARCH 12, 2019

Mr. Chairman, Congressman Aderholt, and other distinguished Members of the Subcommittee, thank you for the opportunity to speak with you today. I thank this Committee for its support of the important work of the Civil Rights Division (Division) of the U.S. Department of Justice. As this Committee is aware, the Civil Rights Division protects the civil and constitutional rights of all people in this country, enforcing the Constitution and federal laws of the United States in pursuit of our founding ideals – human dignity, equal justice, and equal opportunity for all. The funding you provide is essential in allowing the Division to pursue these goals.

Today, I appear before you on behalf of the men and women of the Civil Rights Division who work every day to make these goals a reality. I am proud of their service and their commitment to the Division's mission. On their behalf, I would like to express our appreciation for the support you have given the Division in the past and ask for your continued support in the future.

I will begin by providing a brief overview of the Division's FY 2020 priorities, and the Division's continued work and progress in these areas.

Civil Rights Priorities in FY 2020

For over sixty years, the Division has played a unique and critical role in protecting civil rights in America. Today, the Division has a robust caseload that serves as a stark reminder that discrimination continues to be a reality for many people.

The Division's work has evolved over six decades as Congress has expanded civil rights protections for Americans and given the Division new authority to enforce those civil rights laws. Beginning in 1964, the Civil Rights Act established landmark protections against discrimination based on race, color, national origin, sex, and religion. The Civil Rights Act built the groundwork for other critical federal civil rights statutes passed by Congress, including the Voting Rights Act of 1965, the Fair Housing Act of 1968, the Americans with Disabilities Act (ADA) of 1990, and the Shepard-Byrd Hate Crimes Prevention Act of 2009.

The Division also plays a leading role in enforcing the Trafficking Victims Protection Act (TVPA) of 2000 and its subsequent reauthorizations, which expanded on the older involuntary servitude and slavery statutes the Division has historically enforced.

In FY 2020, the Division will prioritize several enforcement areas that align with Administration and Department priorities. The Division will also prioritize new enforcement initiatives that it has developed to address long-standing and troubling civil rights violations. Finally, the Division will prioritize innovation initiatives designed to improve the way the Division operates and serves the public. The Division's current priority enforcement areas are:

- Prosecuting hate crimes;
- Prosecuting human traffickers and dismantling transnational organized trafficking networks;
- Combatting unlawful hiring practices against U.S. workers;
- Enforcing federal laws that protect servicemembers, veterans, and their families;
- Protecting voting rights;
- Ensuring the religious freedom of individuals and religious organizations;
- Ensuring that individuals have access to treatment for opioid addiction;
- Combatting sexual harassment and sexual abuse;
- Working to eliminate race discrimination; and
- Improving Division operations to promote efficiency and improve service to the public.

Prosecuting Hate Crimes

The Division continues aggressively to combat hate crimes – violent and intimidating acts such as beatings, murders, or cross-burnings – that target an individual because of his or her race, color, national origin, religious beliefs, gender, gender identity, sexual orientation, or disability. In FY 2020, the Division will continue to prioritize prosecutions of hate crimes. It will also continue to look for opportunities to support and work with state and local officials involved in hate crimes prosecutions.

Over the past ten years, the Department of Justice has charged more than 200 defendants with hate crimes offenses. Since January 2017, the Department has indicted more than 50 defendants allegedly involved in committing hate crimes. During that same time, the Department has obtained convictions of over 40 defendants involved in committing hate crimes.

Based on the FBI's latest Uniform Crime Statistics Report, issued in November 2018 for calendar year 2017, there were 7,106 single-bias incidents reported involving 8,126 offenses, 8,493 victims, and 6,307 known offenders, and 69 multiple-bias incidents reported involving 311 offenses, 335 victims, and 63 known offenders.

Hate crimes prosecutions are often high-profile and their impact is felt nationally and sometimes internationally. Since January 2017, the Division's hate crimes prosecutors have

handled a number of high-profile investigations and cases, including cases in Charlottesville, Virginia, Pittsburgh, Pennsylvania, and Jeffersontown, Kentucky.

State and local officials investigate and prosecute many hate crimes. Therefore, the Department seeks new ways to assist state and local partners in combatting hate crimes. For example, when Kedarie Johnson, a popular, gender-fluid teenager in Burlington, Iowa, was brutally murdered and left dead in an alleyway, the Division and the FBI commenced a hate crime investigation. While a simultaneous state murder investigation was underway, the federal investigation obtained valuable information that would support the state murder case. The Division obtained authorization from a federal judge to share that information with state authorities, who then invited the Division to work with state prosecutors during the trial of the state murder case. The Department authorized a Civil Rights Division prosecutor to work directly on the state prosecution team, resulting in the first-ever case in which a DOJ attorney was cross-designated to serve as a local prosecutor and participate in a state court trial against two defendants charged with murdering a transgender victim. In separate trials, the juries found the defendants guilty of first-degree murder and the court sentenced each to life in prison.

To expand and strengthen hate crimes enforcement, the Department launched a Hate Crimes Enforcement and Prevention Initiative. The Civil Rights Division leads that Initiative, which is charged with coordinating the Department's efforts to eradicate hate crime. The Initiative facilitates training, outreach, and education to law enforcement agencies and the public at the federal, state, local, and tribal levels. The Initiative is also following up on productive discussions between the Department and stakeholders that took place at the Hate Crimes Summit that the Department convened in June of 2017.

In 2018, the Department launched a new hate crimes website to provide law enforcement and the public with a centralized information resource.

Prosecuting Human Traffickers

The Division plays a lead role in the Department's efforts to enforce laws against human trafficking, including both sex trafficking and forced labor. Working with U.S. Attorneys' Offices nationwide, the Division's Human Trafficking Prosecution Unit (HTPU) leads prosecutions of complex, multi-jurisdictional, and international cases. It spearheads enforcement initiatives to strengthen the federal law enforcement response to human trafficking crimes and expand federal law enforcement capacity to bring high-impact prosecutions to dismantle transnational, organized trafficking networks. In addition, the Division provides national and international expertise in cases involving forced labor; sex trafficking of adults by force, fraud, and coercion; and international sex trafficking cases.

From FY 2013 – 2017, the Division, in partnership with U.S. Attorneys' Offices, brought 427 human trafficking cases, compared to 235 in FY 2008 – 2012, marking an 82 percent increase.

This increase has required vigorous, coordinated, and innovative efforts to detect and prevent crimes, protect victims, and prosecute traffickers. The increased volume of trafficking cases reflects the intensive outreach, training, capacity-building, and strategic coordination the

Division and Department have carried out in conjunction with key anti-trafficking partners, including federal, state, local, tribal, and international authorities; human trafficking task forces; and non-governmental, anti-trafficking organizations.

The Division's goal is to continue using innovative, collaborative, and proven strategies to tackle trafficking. The HTPU leads the Anti-Trafficking Coordination Team (ACTeam) Initiative, an interagency enforcement collaboration with the FBI, the Executive Office for United States Attorneys, and the Departments of Homeland Security and Labor. The ACTeam Initiative convenes specialized teams of federal agents and federal prosecutors in competitively selected districts to develop high-impact human trafficking investigations and prosecutions in collaboration with national anti-trafficking subject matter experts. During Phase I of the Initiative, which ran from 2011 – 2013, trafficking prosecutions, including cases filed, defendants charged, and defendants convicted, increased markedly in ACTeam Districts.

Mexico is the country of origin of the largest number of foreign-born human trafficking victims identified in the United States. In response to numerous U.S. federal investigations and prosecutions of trafficking networks operating across the U.S.-Mexico border, the Departments of Justice and Homeland Security launched the U.S.-Mexico Bilateral Human Trafficking Enforcement Initiative in 2009 to enhance collaboration with Mexican law enforcement counterparts in order to more effectively combat transborder trafficking threats. Through this initiative, under the leadership of the Civil Rights Division's HTPU, U.S. and Mexican authorities exchange leads and intelligence to strengthen investigations and prosecutions, restore victims, recover victims' children, and dismantle trafficking networks through high-impact prosecutions in both the U.S. and Mexico.

Protecting U.S. Workers

When employers abuse temporary visa programs, U.S. workers miss job opportunities. In March 2017, the Division launched its Protecting U.S. Workers Initiative to tackle this issue. The Initiative focuses on combatting employment discrimination against U.S. workers, in line with the President's Buy American and Hire American Executive Order. The Division uses traditional tools of investigation, lawsuits, outreach, and interagency coordination to fight employer preferences for temporary visa holders, while educating U.S. workers on their rights. The Division uses a multi-pronged approach to ensure that U.S. workers can seek and retain jobs without regard to their citizenship status or national origin. The Division holds companies accountable for discriminating against U.S. workers by paying fines, ensuring affected workers their lost wages, and deterring companies from using illegal preferences.

The Civil Rights Division has also increased its collaboration with other federal agencies, including the Departments of State and Homeland Security, to combat discrimination and abuse by employers improperly using temporary visa workers. In 2017, the Division entered into a similar ongoing partnership with the Department of Labor's Wage and Hour Division to combat discrimination and violations of other federal worker protection laws by facilitating the agencies' information sharing.

Protecting Servicemembers

Servicemembers defend the security and freedom of our nation at great personal sacrifice. While they carry the burdens of this nation, they should not have to worry that the financial sacrifices they are making will result in lenders foreclosing on their homes or repossessing their cars, or businesses wrongfully obtaining default judgements against them that damage their credit. Similarly, servicemembers and their families should not be prevented from voting while stationed away from home or face employment discrimination because of their military service.

The Division uses its Servicemembers and Veterans Initiative (SVI) to conduct outreach, assistance, and training for servicemembers, veterans, and military families. The SVI facilitates and coordinates listening sessions between the Department and military members to identify the legal issues impacting today's servicemembers. It educates military members and legal practitioners about the federal laws protecting servicemembers, as well as the Department's work on behalf of servicemembers, veterans, and military family members. Following these listening sessions, the SVI relays matters with litigation potential to the Division's litigating components. The SVI's referrals have enabled the Division to initiate a number of investigations and cases.

The Division vigorously protects servicemembers' civilian employment rights by enforcing the Uniformed Services Employment and Reemployment Rights Act (USERRA), voting rights by enforcing the Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA), and financial and housing security through the Servicemembers Civil Relief Act (SCRA). The Division also strives to protect the rights of servicemember spouses, dependents, and veterans eligible for certain protections under the SCRA and UOCAVA. Finally, the Division works to protect the rights of veterans with disabilities and conducts outreach to educate servicemembers, military family members, veterans, legal professionals, and advocates about these federal protections.

During this Administration, our SCRA settlements have included over \$6 million in damages and civil penalties.

Additionally, in FY 2017 and 2018, the Division reviewed 95 claims involving employment rights of servicemembers and veterans, offered representation to 18 claimants, and filed five complaints on their behalf. It entered three court-approved consent decrees and facilitated 15 additional settlements. The grand total for these settlements is over \$340,000 in cash payments, pension credits, sick leave, backdated promotions, and one job reinstatement.

The Division closely monitored UOCAVA compliance in special, primary, and general elections for federal office throughout the country to ensure that Americans serving in our uniformed services, their families and U.S. citizens living overseas have a meaningful opportunity to request and receive their absentee ballots in time to vote and have their votes counted. Before federal elections in 2017 and 2018, the Division monitored each State and Territory to determine whether there were obstacles to timely transmission of UOCAVA absentee ballots. The Division then confirmed that these ballots were, in fact, timely sent. The Division engages in continuous follow-up on ballot transmission issues, review of possible structural impediments to compliance, and other UOCAVA obligations. The Division also regularly coordinates with the Federal Voting Assistance Program at the Department of Defense.

As part of that nationwide enforcement effort, in 2018 the Division filed suit to enforce UOCAVA and obtained consent decrees in two states. Through the last two fiscal years, the Division has also worked out other informal resolutions with states to protect the rights of military and overseas voters.

The Division continually looks for new ways to protect the rights of servicemembers, veterans, and military family members. For example, the Division launched a Veterans' Access Initiative to increase access to community life for our nation's veterans with disabilities. The Division routinely receives complaints that public programs and services are inaccessible to veterans with disabilities because of architectural or programmatic barriers. Such barriers can impede or prevent veterans with disabilities from returning to school, accessing a polling place, or even going to a park or restaurant with their family.

The Division addresses widespread discrimination against veterans with disabilities who use service animals. The ADA generally requires public entities and public accommodations to provide access to individuals with disabilities who use service animals. Yet, many public accommodations across the country prohibit individuals with disabilities from entering with a service animal. Indeed, the Division receives more citizen complaints alleging service animal-related discrimination than any other issue, and a large percentage of those are from veterans with disabilities, for whom the ability to use a service animal is critical to re-integration into their communities. As a result of this new emphasis on access for veterans with disabilities, the Division and U.S. Attorneys' Offices have dozens of active investigations of alleged discrimination against veterans with disabilities. To complement this enforcement work, the Division is engaging in outreach to covered entities, trade organizations, and veterans—both to educate stakeholders on the ADA's service animal requirements and to hear their perspectives on perceived barriers to compliance.

Protecting Voting Rights

The Division's Voting Section enforces federal voting laws and defends the United States when it faces lawsuits over voting matters. Section 2 of the Voting Rights Act prohibits racial discrimination in voting in every jurisdiction in the country. Since January 2017, the United States has participated as a party or an amicus in six cases brought under Section 2. Three of those cases have been finally resolved by federal appellate courts. In each of those three cases, the appellate courts have adopted the position advocated by the United States. One case remains pending in federal district court, and two are pending in federal circuit courts. In one of those cases, the United States will be participating in oral argument at the end of March 2019 before the en banc Ninth Circuit in a case presenting an important question regarding Section 2's results test.

In 2017, the Division participated in an important voting rights case in the Supreme Court involving the interpretation of the National Voter Registration Act (NVRA), *Husted v. A. Philip Randolph Institute*. The Supreme Court adopted the Department's position, which guarantees that state and local jurisdictions can uphold the right to vote by maintaining complete and accurate voter registration rolls.

The Division also recently entered into four agreements to protect the right to vote. The first of these resolved a lawsuit that the Division brought under the UOCAVA to protect the

rights of military and other overseas absentee voters to participate in a special election in Arizona's 8th Congressional district. In June 2018, the Division entered into a settlement agreement with the State of Wisconsin that ensures that Wisconsin voters who temporarily reside overseas receive voting protections. The next month, July 2018, the Division entered into a settlement agreement with the Commonwealth of Kentucky that guarantees that Kentucky will make a reasonable effort, as required by Section 8 of the NVRA, to remove from its voter rolls the names of individuals who have become ineligible to vote due to a change in residence. And just last month, February 2019, the Division entered into a settlement agreement with the State of Connecticut that will ensure that Connecticut, as required by the NVRA and the Help America Vote Act, will remove from its voter rolls the names of individuals who have died.

Every year, the Voting Section also monitors elections in jurisdictions around the country. In FY 2016, the Division sent over 500 election observers to 26 jurisdictions for the November 2016 general election. During the elections in November 2018, the Division deployed personnel to 35 jurisdictions in 19 states to monitor compliance with federal voting rights laws.

In addition, the Division's Disability Rights Section enforces the ADA's requirements to ensure equal access to polling places and the election process for people with disabilities. In 2015, the Division, partnering with U.S. Attorneys across the nation, launched the ADA Voting Initiative to ensure that people with disabilities have an equal opportunity to participate in the voting process, including in the 2016 presidential elections. The ADA Voting Initiative covers all aspects of voting, from voter registration to casting ballots at neighborhood polling places. Through this initiative, more than 1,300 polling places have been surveyed to identify barriers to access. Last month, the Division entered into its most recent settlement agreement under this Initiative. That settlement agreement resolves a complaint by a Concord, New Hampshire voter alleging that the City failed to provide an accessible ballot to that voter, who is blind. The Division is committed to continuing this important work to guarantee the right to vote on behalf of all Americans.

Protecting Religious Freedom

The right to practice one's faith freely, to participate in civic life without discrimination, and to be free from violence based on one's faith are fundamental American values protected by our Constitution and civil rights laws. The Division is working to advance these core areas of religious freedom in a number of ways.

The Division enforces the Religious Land Use and Institutionalized Persons Act (RLUIPA). RLUIPA protects religious communities from zoning laws or decisions that discriminate against places of worship. It also helps ensure that individuals in institutions such as jails can practice their faith without undue burden.

To increase enforcement and public awareness of the land use provisions of RLUIPA, on June 13, 2018, the Attorney General announced the Place to Worship Initiative. The Initiative focuses on outreach and education efforts targeted at religious leaders, county and municipal officials, and the general public. In FY 2017, the Division initiated 22 matters, opened 17 investigations, filed six cases, and settled six lawsuits involving discriminatory zoning laws or decisions that affect places of worship or religious schools or centers.

During the same period, it opened two investigations and continued enforcing one injunction involving religious practice by individuals in institutions. In 2018, the Division initiated a lawsuit under Title VII of the Civil Rights Act against a county in Wisconsin alleging that the influenza vaccination exemption policy implemented by one of its senior living centers discriminated on the basis of religion.

The Division has a Religious Discrimination Initiative in conjunction with U.S. Attorney Office partners to combat religious discrimination in schools, including harassment against minority faith groups. Since 2017, the Division, in coordination with the U.S. Attorneys' Offices, has opened a number of new investigations in this area. For example, in 2018, the Division's Educational Opportunities Section opened an investigation into allegations that a public high school failed to respond appropriately to peer-on-peer religious harassment.

The Civil Rights Division also has been active in filing amicus briefs and statements of interest in cases involving a wide range of religious liberty issues, including school choice, religious expression on college campuses, and other religious expression issues.

Recognizing that the right to practice one's faith without fear of violence is critical to the exercise of religious freedom, the Division has been active in prosecuting hate crimes involving attacks or threats against places of worship or against individuals based on their religion. For example, since January 2017, the Division has obtained eight indictments and six convictions in cases involving arson or other physical attacks, or conspiracy or threats to commit such attacks, against places of worship. Religious hate crimes constitute a significant number of hate crimes, second only to racial hate crimes, and the Division is committed to prosecuting vigorously such crimes.

Addressing Opioid Addiction

The opioid epidemic is a crisis of epic proportions, impacting nearly every community across the country. On November 1, 2017, the President's Commission on Combating Drug Addiction and the Opioid Crisis issued a report calling for comprehensive action by the federal government. The Division and U.S. Attorneys' Offices are responding, working to ensure that individuals who have completed, or are participating in, treatment for opioid use disorder (OUD) do not face unnecessary and discriminatory barriers to recovery. People with OUD who are in treatment or recovery may experience discrimination in settings such as employment or the receipt of state and local programs and services. Businesses that seek to provide treatment to affected individuals may encounter discriminatory zoning restrictions. The Division focuses on addressing and removing these barriers. Through outreach, technical assistance, and enforcement under the ADA, the Division aims to increase the number of people in treatment and recovery who succeed and re-engage with their communities and the workforce.

Conducting outreach is a crucial part of this work. Through analysis of federally-collected data, the Division has identified cities, counties, and states with the highest numbers of opioid overdoses. In FY 2020, the Division will conduct targeted outreach in many of these communities. Through this outreach, the Division will educate public employers, public entities, and public accommodations about the ADA's protections for people in treatment for, or recovery from, OUD. The Division will also inform health care workers, social workers, members of

faith-based organizations, and other professionals in these communities about the ADA's protections for people with OUD. To complement this outreach, the Division and U.S. Attorneys' Offices are investigating complaints from people with OUD who are in treatment or recovery.

Combating Sexual Harassment and Sexual Abuse

Sexual harassment in housing, employment, and education as well as sexual assaults in prisons and nursing homes are long-standing civil rights challenges that the Division is making a renewed commitment to address.

Sexual harassment in housing, including harassment of tenants by landlords, property managers, and maintenance staff, affects an untold number of vulnerable people. It often involves unrelenting, unwanted sexual advances or requests for sexual acts in exchange for a place to live, home repairs, reduced rents, or delayed evictions.

On the 50th anniversary of the Fair Housing Act, the Division launched the Sexual Harassment in Housing Initiative to increase awareness and reporting of sexual harassment in housing. The Division seeks to combat sexual harassment by driving more referrals to the Department, enabling it to bring more lawsuits to enforce the Fair Housing Act's prohibition on sexual harassment. Since the launch of the Initiative in FY 2018, the Division has opened a record number of investigations and filed twice as many sexual harassment in housing complaints as it filed in all of FY 2017 and as many as the highest total number of complaints it has filed in any of the last five fiscal years.

One recent case highlights the nature and importance of the Initiative's work. On April 11, 2018, the United States filed *United States v. Waterbury* (N.D.N.Y.). The complaint alleges that Douglas Waterbury, a residential property owner and landlord in the Oswego, New York area, sexually harassed female tenants and potential tenants. The suit alleges that in one instance Waterbury locked a prospective tenant—who was a teenager at the time—in a rental unit, lifted her shirt and felt her breasts, pushed her onto a couch, engaged in unwelcome and painful sexual intercourse and oral sex with her, and instructed her not to tell anyone what had just happened. This case is in active litigation.

On February 28, 2018, the Division announced the formation of the Sexual Harassment in the Workplace Initiative (SHWI), which will address sexual harassment in the public sector workplace and build on the Division's already robust enforcement in this area. The SHWI seeks to increase litigation of sexual harassment claims against state and local government employers by taking a more aggressive approach to the investigation of charges referred by the Equal Employment Opportunity Commission (EEOC). Since the SHWI began, the Division has filed *United States v. City of Houston*, a suit alleging sex harassment in the Houston Fire Department.

The SHWI seeks to develop tools to hold state and local government employers accountable for sexual harassment, including by identifying changes to existing practices and policies that will result in work environments that are free from sex harassment and discrimination. As part of the SHWI, the Division will conduct outreach to state and local government employers. Outreach will focus on:

- creating trusted and safe avenues for employees to report sexual harassment;
- ensuring management support for anti-discrimination policies and practices;
- implementing accountability measures to ensure the timely and effective resolution of sexual harassment complaints;
- adopting comprehensive anti-sexual harassment policies and procedures that include regular, tailored, and interactive training for employees; and
- providing safeguards against retaliation for persons who report sexual harassment and for employees who support them.

In addition, on December 21, 2018, the Division signed a Memorandum of Understanding (MOU) with the EEOC. The MOU will strengthen the Division's efforts to prevent, investigate, and prosecute sexual harassment in state and local governments. The MOU includes provisions for the expedited coordination of any charge involving state or local government employers where the EEOC's preliminary investigation of a charge reveals that immediate action is needed to prevent further harm. In those cases, the EEOC will provide the Justice Department with the information necessary to obtain an injunction, temporary or preliminary relief, in federal court for the affected employees, pending the final outcome of the charge.

The Division's Educational Opportunities Section will continue its work to protect students from sexual harassment and assault in K-12 schools and institutions of higher learning, including through new investigations and through the monitoring of existing settlement agreements.

Finally, the Division is increasing its efforts to protect individuals in correctional facilities from exploitation, discrimination, and violence. In FY 2020, the Division will focus efforts on an initiative to address the sexual abuse of prisoners, pretrial detainees, and juveniles in custodial settings. This initiative will protect the constitutional rights of people in custody and help further the goals of the Prison Rape Elimination Act (PREA) by preventing, detecting, and responding to custodial sexual abuse. In line with these priorities, in FY 2018, the Division opened two investigations of alleged sexual abuse of women prisoners. In addition, the Division continues to enforce approximately 15 agreements with state and local governments concerning a variety of civil rights concerns in conditions in adult jails and prisons.

Working to Eliminate Race Discrimination

Last year, the Division and the Department commemorated the 50th anniversary of the tragic assassination of Dr. Martin Luther King, Jr. Every section of the Civil Rights Division plays a role in seeking to make Dr. King's vision of a nation free from racial prejudice a reality.

The Division enforces numerous civil and criminal statutes that protect against discrimination on the basis of, or violence motivated by, race. For example, since the passage of the Fair Housing Act, the Division has been at the forefront of enforcing its protections,

eliminating discrimination on the basis of race in housing, and vindicating the rights of people across the country.

In May 2018, the Division settled a race and national origin lawsuit brought under the Fair Housing Act and the Equal Credit Opportunity Act. The Division and the defendant, KleinBank, agreed that KleinBank would ensure that its mortgage lending services are made available on a non-discriminatory basis. The settlement also required the bank to expand its banking services in predominantly minority neighborhoods.

Last March, the Division successfully secured the conviction of a man for committing a federal hate crime when he used a stun device during the racially-motivated assault of a neighbor at his apartment complex in Draper, Utah. The evidence presented at trial showed that the defendant yelled a racial slur at the victim's 7-year-old son as the boy rode on a scooter in a common area at the apartment complex, used a racial slur against the victim, and used a stun cane to injure the victim.

In August 2018, the Division's Housing and Civil Enforcement Section successfully settled a lawsuit against the Village of Tinley Park, Illinois, a suburb of Chicago, alleging that it violated the Fair Housing Act when it refused to approve a low-income housing development in response to race-based community opposition. The settlement required the Village to pay \$410,000 and take a number of actions to guard against further housing discrimination, including training elected officials and individuals involved in the planning process, developing a fair housing policy, and hiring a fair housing compliance officer.

Multiple sections of the Division work to eliminate discrimination on the basis of race in the workplace. The Division's Employment Litigation Section enforces Title VII of the Civil Rights Act of 1964 and seeks to eliminate race, color, and other forms of workplace discrimination. The Division's MOU with the EEOC will strengthen the Division's efforts to prevent, investigate, and prosecute race discrimination, including racial harassment, and other alleged violations by state and local governments.

The Division has also successfully litigated Title VII lawsuits across the nation. For example, in August 2018, the Division settled a Title VII race discrimination lawsuit against Mississippi Delta Community College. The College agreed to pay \$75,000 in back pay and compensatory damages to the alleged victim and to implement appropriate training on identifying and correcting unlawful discrimination.

In a case against the City of Jacksonville, Florida, the Division successfully prosecuted and settled a Title VII race discrimination case about the City's promotional practices for positions in the Jacksonville Fire and Rescue Department. The settlement obligated the City to offer settlement promotions to qualified African Americans and to establish a \$4.9 million settlement fund for eligible claimants.

In February 2018, the Division successfully settled a race, color, and national origin discrimination case brought under Title II of the Civil Rights Act of 1964. In that case, the Division reached a settlement to resolve a lawsuit against the owners and operators of 360 Midtown, a sports bar and lounge located in Houston, Texas. The settlement resolved a lawsuit

that alleged that the sports bar engaged in a pattern or practice of illegal conduct by implementing discriminatory practices to discourage or deny admission to African-American, Hispanic, and Asian-American patrons. The alleged practices included selectively imposing cover charges against minority patrons and selectively enforcing a dress code against them.

The Division's Criminal Section vigorously pursues prosecutions of those who, motivated by race, engage in acts of violence and intimidation. The Division's Voting Section likewise will continue vigorously to enforce the race-discrimination protections of the Voting Rights Act. Finally, the many investigators, paralegals, information-technology professionals, and administrative staff in the Division work tirelessly to support this work.

The Division is committed to continue its efforts to eliminate race discrimination in this County.

Improving Division Operations

To enforce the law effectively, the Division must constantly adapt and improve. That means empowering our staff to look for new and better ways of doing their jobs and ensuring that administrative services—personnel support, budget, and information technology—align with our mission. It also means effectively managing our workforce.

In May 2015, the Division launched its Innovation Initiative. Now in its third year, the Initiative continues to focus on improving the Division's ability to enforce federal civil rights laws by developing and launching new ideas and actions that fundamentally improve how we do business. The Initiative:

- Empowers internal innovation by encouraging employees to develop and implement innovative solutions to common challenges and making innovation a key principle of new Division-level management initiatives;
- Solves “sticky” challenges using structured methods like design thinking, lean, and behavioral science; and
- Connects the Civil Rights Division to the broader community of innovators in government, academia, and industry.

The Initiative brings a strategic vision to the process of making the Civil Rights Division a more effective and efficient part of government. Here are some examples of how we are transforming the way we work.

Consolidating Our Workforce. Currently, the Division works out of four buildings spread across Washington, D.C. In mid-2019, the Division will consolidate 95% of our workforce in a single location in Northeast D.C. This will be the first time Division staff has been located in one building in more than two decades.

There is an inextricable link between space, culture, and performance. The Initiative is using our move to a single location to transform how the Division works. This includes:

- Enhancing our identity as one Division by creating a space that reflects our core values and promotes collegiality and collaboration between colleagues; and
- Enhancing how we work by adopting user-centered approaches to delivering shared services (information technology, litigation support, etc.), and managing documents through digitization.

Concept Lab. The Concept Lab is an idea incubator that puts employees in a fast-paced, entrepreneurial setting as they tackle tough problems. In 2017 and 2018, members of one Concept Lab team challenged themselves to help women who experience sexual harassment by housing providers. Available data suggests that up to 80% of women who experience such harassment do not report it. This team wanted to change that dynamic. The team focused on exploring new approaches that would help increase the likelihood that victims of sexual harassment would file complaints. The team spoke with and researched the accounts of survivors of sexual assault. They spoke with organizations and experts with extensive expertise on the issue and conducted small but meaningful tests to see what approaches might actually encourage women to come forward to report harassment. Eventually, the team launched a national campaign, which became the Sexual Harassment in Housing Initiative that I discussed previously.

Online Complaint Portal. The Division has initiated a project that will streamline the process for citizens wanting to connect with the Civil Rights Division. The Division intends to build an internet-based portal that: 1) offers a unified and efficient means for citizens to report discrimination; and 2) improves the Division's ability to assess and respond to complaints.

Conclusion

Mr. Chairman, Congressman Aderholt, and other distinguished Members of the Subcommittee, I would like to close by thanking you for this opportunity to discuss the Division's FY 2020 budget request and the work of the Civil Rights Division. We are grateful for this Committee's leadership and the support it has provided to the Division. Your willingness to invest in and support our workforce allows us to pursue the Division's mission and the priorities I have discussed today. Thank you for your support.

I look forward to answering any questions you may have.

Mr. SERRANO. Thank you, sir. We apologize for the door, it was left over from Halloween. [Laughter.]

That is the best I could do today.

VOTING RIGHTS

Ever since the Supreme Court's *Shelby County v. Holder* ruling ended some federal oversight under the Voting Rights Act, there has been a historic increase in the threat and reality of voter suppression. The House last week passed H.R. 1 to reform voting rights protection and upgrade elections security, among other things.

Question: how many cases is the Division, either the Voting Section or the Criminal Section, working in Georgia and in Florida?

Mr. DREIBAND. Well, Chairman Serrano, as you know, the right to vote is one of the most important rights we have; it is secured by the Constitution of the United States and several laws, including the Voting Rights Act. As I mentioned in my opening statement, we have participated in various ways through litigation and otherwise in six Section 2 Voting Rights Act cases since 2017. With respect to ongoing investigations, voting or other matters, I cannot comment on those, but I can assure you that the message that I have delivered to the Voting Section of the Civil Rights Division, as well as the Criminal Section of the Civil Rights Division, is that we are committed to aggressive and zealous enforcement of all of the laws within our jurisdiction, including the Voting Rights Act in particular.

That law, as you know, was enacted in 1965, and it was primarily designed to combat race discrimination in voting, but it does reach other areas as well, and ensures protections for people who struggle with the English language, for example, and other protections as well.

Mr. SERRANO. So, with that in mind, how does the Civil Rights Division prioritize efforts and manage its election-related workload?

Mr. DREIBAND. Well, we do that in many different ways. So we, for example, have settled cases to ensure the integrity of state voter laws. We also in the 2016 and 2018 elections dispersed several people throughout the United States to monitor the polls.

In fact, in the 2018 election I spent much of the day with a command center run by our Criminal Section and with our Voting Section attorneys, who were monitoring in real time as voting was actually happening, complaints, concerns that people were raising. We worked in coordination with the Federal Bureau of Investigation to both monitor the activities on that day and, in addition, disperse people throughout the United States to several jurisdictions to monitor the voting and report on any problems that anyone saw.

We also conduct investigations in various states around the country to ensure that they are complying with the Federal voting laws. And then, of course, we engage in litigation through the Federal court system to enforce various Federal laws within our jurisdiction.

Obviously, we would prefer to settle cases, if we can, and oftentimes we are encouraged that States will work with us to reach an appropriate resolution to a dispute, but, if we have to, we are pre-

pared to litigate and do litigate cases in the Federal courts throughout the United States.

Mr. SERRANO. Now, I know you can't get into specific cases, but do we know what the top number of complaints are in voting-related issues?

Mr. DREIBAND. Chairman Serrano, I don't know that data off the top of my head, but we do take complaints from the public, and our Voting Section investigates complaints, our Criminal Section does as well. And we work with the Federal Bureau of Investigation and at times other components of the Federal Government as well, for example the Department of Homeland Security, and other aspects of the executive branch of the Government to investigate complaints, either alleged violations of the Voting Rights Act, the National Voter Registration Act, the Help America Vote Act, and other laws as well.

Mr. SERRANO. Could you at a later date give the committee some numbers just for our information of what is the number one complaint, you know?

Mr. DREIBAND. Chairman Serrano, I will certainly take that back to the Department and, working with our Office of Legislative Affairs, provide you with whatever data we can satisfy concerns you may have, as well as other members of the subcommittee.

Mr. SERRANO. Thank you.

H.R. 1 as passed by the House would add significant new election system protections; if enacted, how would Voting Section workload be affected? What resources would help you carry out your mission as you understand H.R. 1?

Mr. DREIBAND. Chairman Serrano, I am not familiar with H.R. 1 and would look forward to reviewing the bill, and in consultation with the many dedicated and career attorneys in our Voting Section talk with them. Our Policy Section of the Civil Rights Division would also look at it. And then I would be happy to take it back and work with you and your colleagues on it, as well as in conjunction with what we have at the Justice Department, it is called our Office of Legislative Affairs. That office provides a liaison, as you know, between this subcommittee and other committees of the House of Representatives, and it is something that we would look at and weigh in as appropriate.

Mr. SERRANO. Mr. Aderholt.

Mr. ADERHOLT. Thank you.

Of course, we have talked about the Civil Rights Division, of course it is charged with overseeing the U.S. voting rights laws. And you have talked a little bit about it, but could you describe the efforts that you undertook in your division, particularly during the 2016 and 2018 elections, to monitor compliance with the Federal voting rights laws?

Mr. DREIBAND. Sure. In both the 2016 election and the 2018 election, Ranking Member Aderholt, the Civil Rights Division, as well as other components of the Justice Department, dispersed literally hundreds of people throughout the United States to monitor the polls in several dozen states at several dozen locations.

And what we did is we took recommendation from the experts we have in our Voting Section about where we should send people, and particularly with respect to areas of concern based on their judg-

ment. Many of the individuals in our Voting Section have worked at the Department for several decades and devoted their professional lives to protecting the right to vote. And so what we do is we take their—and what we did was took their recommendations and generally followed them, and then many people went out throughout the United States and monitored the polls as people were voting.

Meanwhile, back in Washington, we had people from our Voting Section, as well as our Criminal Section, working with the FBI and the Department of Homeland Security to monitor through our command center indications of potential violations of any of the voting laws, and to do what we could even on election day to take prompt action, if any was appropriate. And then later, of course, if any investigations were warranted, we would investigate any allegations of violations of the right to vote.

In addition, I was particularly heartened when I first joined the Department to see that many of our attorneys and other staff in the Civil Rights Division who do not focus on voting laws, that is they are focused on say, for example, disability discrimination or other forms of discrimination, they volunteered themselves on the election day to help take in complaints or reports of alleged violations of the Voting Rights Act or other laws, and worked very hard to do that.

Mr. ADERHOLT. Well, can you talk a little bit about or give us some examples of the type of potential violations that you were on the lookout for in the 2018 and 2016 elections?

Mr. DREIBAND. Sure. Well, the voting rights laws protect everything from the right to vote to be free of race and other forms of discrimination, to protections related to Americans and servicemembers who are overseas and their right to vote, and so—as well as the right to have access to the ballot for certain jurisdictions where people may struggle with the English language, for example.

And so we look at those, all of those areas, you know, with respect to the laws and the standards that govern the laws within our jurisdiction about the right to vote. Our voting rights attorneys and other staff and investigators look for those things. They take in reports of any kind of violation of that sort, and then we do what we can, either immediately or to remedy the problem, if we find one, or to investigate allegations after the fact as well.

Mr. ADERHOLT. Could you talk a little bit about the enforcement tools that you have available?

Mr. DREIBAND. Well, we have many enforcement tools available. The enforcement tools that we have do vary by statute. There are some statutes on the civil side that grant us the authority to subpoena documents and other information and witnesses. Obviously, our Criminal Section, working with the FBI, works through the normal law enforcement process that the Congress has set up for the criminal laws of this country, including the use of grand juries. We have access to the Federal courts, depending on the particular kind of case or matter that may be involved, either through civil lawsuits or criminal prosecutions. And we have staff, we have everything from architects who deal with disability rights issues to access to voting places by individuals with disabilities, we have

people who speak various languages who help us work with very vulnerable populations throughout the United States. And we try to utilize the tools that the Congress has given us to use to the best we can to try to eliminate all forms of discrimination within this country by using the statutes that Congress has authorized us to prosecute and investigate.

Mr. ADERHOLT. Let me get in one more question, if I could. The National Voter Registration Act of course is a law that is designed to expand registration opportunities for all citizens and ensure proper maintenance of voter registration lists, and states are required to keep voter lists accurate and also current. Can you talk about the role that proper maintenance of voter registration lists play in the national voting integrity effort?

Mr. DREIBAND. Sure. There are two Federal laws that the Congress has enacted that ensure the integrity of the state lists of voters, the National Voter Registration Act and the Help America Vote Act. And I think the design of those laws as meant by Congress was to ensure the integrity of the voting system; to ensure that states satisfy their duty under Federal law to make sure that their lists of voters are accurate, to prevent voter fraud, and to protect the rights of all Americans to know that when they cast their ballot they are doing it through a fair process; and that the states have a duty to maintain that process and to protect all of our right to vote when we go to the polls.

Mr. ADERHOLT. And then, lastly, are there any examples of litigation regarding the maintenance of voter lists that you have brought in the past?

Mr. DREIBAND. Yes. As I said earlier, Ranking Member Aderholt, we try, if we can, to settle any kind of disputes within our jurisdiction if we can reach an appropriate settlement without litigation.

And so with respect to the integrity of the voting lists we were able to settle the matters with the States of Kentucky and Connecticut, and it is mentioned in my statement for the record, and I commend both the States of Kentucky and Connecticut for doing so.

In addition, the Justice Department participated in a matter pending before the Supreme Court of the United States involving the voter rolls in the State of Ohio, and the Supreme Court agreed with the Justice Department that the State of Ohio's efforts to comply with the National Voter Registration Act and the Help America Vote Act was fully compliant.

Mr. ADERHOLT. Was not?

Mr. DREIBAND. Was compliant; no, that Ohio complied with the law.

Mr. ADERHOLT. All right. Thank you.

Mr. SERRANO. Thank you.

Now we will begin our 5-minute-per-member round, and you know what this means.

Mr. Cartwright.

ROLE OF CIVIL RIGHTS DIVISION

Mr. CARTWRIGHT. Thank you, Mr. Chairman.

And, Mr. Dreiband, thank you for joining us.

I want to make sure I have a clear understanding of your role at the Civil Rights Division. Your job is to pursue civil rights cases against discrimination on the basis of race, color, sex, disability, religion, familial status, and national origin; am I correct in that

Mr. DREIBAND. Representative Cartwright, the protected categories do vary from statute to statute, but the categories that you mentioned are among those that are vested within our jurisdiction and, as the Assistant Attorney General, it is my job to direct and help our career staff, our lawyers and investigators, enforce those very important protections against discrimination.

Mr. CARTWRIGHT. And do you agree that a primary purpose of both the Civil Rights Division and our Federal civil rights laws, including Title VII, the ADA and the ADEA, is to protect the rights of the marginalized and vulnerable communities?

Mr. DREIBAND. Title VII of the Civil Rights Act does protect against race, color, national origin, religion, and sex discrimination in employment. It is one of the most important laws that we enforce; it was enacted as part of the Civil Rights Act of 1964.

The Americans with Disabilities Act, of course, protects against disability discrimination both in employment and with respect to various programs of state and local governments and public accommodations.

Mr. CARTWRIGHT. I don't mean to be impolite, but they only give us 5 minutes and I have a chairman who is going to be banging that gavel on me any minute, that was a yes-or-no question and I take it it is a yes.

NUMBER OF CASES BROUGHT BY THE CIVIL RIGHTS DIVISION

Public records indicate the Civil Rights Division has started 60 percent fewer civil rights cases under President Trump than under the first 2 years of President Obama, and also 50 percent fewer cases than under President George W. Bush. Do you know if that is an accurate assessment?

Mr. DREIBAND. Representative Cartwright, I don't know what numbers you are referring to. What I do know, though, is that we have brought a record of cases under the Fair Housing Act through our sexual harassment initiative, we brought a significant increase in human trafficking prosecutions, and we have participated and brought several other cases under many of the other laws within our jurisdiction.

Mr. CARTWRIGHT. OK, so you don't know.

Do you agree that the biggest decline in new filings has been in the areas of systemic enforcement misconduct and violation of disability rights?

Mr. DREIBAND. Representative Cartwright, I am not sure what you are referring to there. The message that I have consistently expressed to the various sections of the Civil Rights Division, including our Disability Rights Section, is that we are committed to zealously and aggressive enforcement of the civil rights laws.

Mr. CARTWRIGHT. Are you telling me that enforcement actions have increased or stayed the same, or are you agreeing with me that they have declined since the last two administrations?

Mr. DREIBAND. Well, Representative Cartwright, enforcement efforts with respect to many of the areas of our jurisdiction have in-

creased, including, as I said, under our Sexual Harassment in Housing Initiative. We brought a record number of investigations and a record number of pattern or practice of sexual harassment lawsuits under that initiative.

Mr. CARTWRIGHT. I asked you about violation of disability rights; have those gone up, have they gone down, or have they stayed the same? And, if you don't know, it is OK, you can tell us.

Mr. DREIBAND. Representative Cartwright, with respect to disability rights, I am not sure what you are referring to.

Mr. CARTWRIGHT. The Americans with Disabilities Act. I think you actually even mentioned that.

Mr. Dreiband, the decline is deeply concerning to me, that is why I am asking these questions. Americans with disabilities are less likely to be employed today than they were before the ADA was enacted in 1990. Those that do work are often in low-paying jobs and earn considerably less than someone without a disability. Isn't systemic pay and job discrimination an indicator of a need for increased enforcement?

Mr. DREIBAND. Representative Cartwright, I agree with you that zealous and aggressive enforcement of the Americans with Disabilities Act is critically important to the protection of rights of the individuals with disabilities in this country. We enforce that law in various ways, including in particular with respect to the right to vote. We have an initiative committed solely to the voting rights of individuals with disabilities to make sure that they have access to their right to vote, but we also enforce the Americans with Disability Act in employment within the jurisdiction that we have. Our jurisdiction with respect to employment is limited to public employers and we do enforce that law, and we enforce it in many other ways as well.

Mr. CARTWRIGHT. Would you mind if I followed up with your office, because we don't seem to see eye-to-eye on the statistics. It is clear to us that enforcement of civil rights cases has decreased dramatically under this administration and I want to see if we can pin you down on that. And, if we can't, I want to seek a commitment from you to reverse that trend. Will you work with our office?

Mr. DREIBAND. Well, Representative Cartwright, first of all, I am fully committed to aggressive and zealous enforcement of the Americans with Disabilities Act and to all of the laws within our jurisdiction. With respect to working with you and your colleagues on the subcommittee, I work through our Office of Legislative Affairs at the Department of Justice and would be delighted to work with you and your colleagues as appropriate.

Mr. CARTWRIGHT. All right, thank you.

I yield back.

Mr. SERRANO. Mr. Palazzo.

Mr. PALAZZO. Thank you, Mr. Chairman. I appreciate you being here today.

HUMAN TRAFFICKING

I would like to address your office's attempts to prosecute human trafficking. We know human trafficking is prolific in the United States and, in looking through some of the notes here, you point out that Mexico is the country of origin of the largest number of

foreign-born human trafficking victims identified in the United States. Of course, several reasons, probably because we have a large, 2,000-mile contiguous border with Mexico and that border is not secure, and at any given time drugs, human trafficking, foreign nationals with intent to do Americans harm can just cross our border.

Could you tell me a little bit about—and I know Anne Wagner, our colleague in the House, has been leading this effort for several years to address human trafficking and she has done a wonderful job. Even my home state has taken this extremely seriously in passing legislation to increase the penalties of human trafficking, and our law enforcement are actively engaged. Can you tell me a little bit more about what your office is doing? And do you see a trend, an upward trend or a downward trend based on our efforts, and can we do more?

Mr. DREIBAND. Yes. We have what we call our Human Trafficking Prosecution Unit, which is part of our Criminal Section of the Civil Rights Division, and that unit coordinates efforts throughout the Federal Government, with the FBI, the Department of Homeland Security, United States Attorney's Offices, and even the Mexican Government, among others, to deal with this problem of human trafficking.

We do see a problem whereby human traffickers will smuggle people across the border from Mexico into the United States for the purpose of human trafficking, both with respect to sex trafficking and forced labor. It is a very serious problem and it is one where we have seen a significant increase in the number of prosecutions, in fact an approximately 82-percent increase from 2013 to 2017 compared to the prior 4-year period.

And just within January of this year we obtained long sentences for several members of the Rendon-Reyes trafficking organization. In that case, these were individuals from Mexico who for more than 10 years smuggled dozens or perhaps hundreds of women across the border—and young girls as well, some as young as 14 years old—into the United States and forced them into prostitution. And working with the Mexican Government through the U.S.-Mexico Bilateral Human Trafficking Enforcement Initiative, and with the FBI and with our prosecutors in the Civil Rights Division, we were able to bust up that international human trafficking ring. And there are others like that that we see as well.

Mr. PALAZZO. How many others do you feel are out there? And also you say smuggled; by smuggled, I am assuming that they are not crossing the ports of entry, they are coming in through our porous border, correct?

Mr. DREIBAND. Well, I think these human traffickers have different ways of bringing people across the border. They can bring them—there are various ways they can do it. And so the problem I think that we are seeing is there is a lot of deception happening by these human traffickers where they bring these people in. And these are typically very vulnerable individuals, both with respect to sex trafficking and forced labor, and they come into the United States and they find themselves in these horrible conditions where they are forced to do things against their will; they are abused, mistreated, and it is a really terrible thing for them.

And we do what we can to investigate these allegations, to bring prosecutions when appropriate. And, in addition, through the Office of Justice Programs we also help—through the Trafficking Victims Protection Act help to try to remedy the problems that these things have created for the victims of human trafficking.

Mr. PALAZZO. Well, I hope we can eradicate 100 percent of human trafficking, especially in this day and age with technology, and we need to provide the resources to our men and women at the border, so they can intercept these outfits who are smuggling young children across our border into the sex trade and forced labor.

EMPLOYMENT DISCRIMINATION

Not knowing how much time I have, I would like to move to another question. You say part of your job is protecting U.S. workers and Buy American and Hire American Executive Order is something that you enforce. Can you just tell me, what sort of industries actually abuse this practice the most, and is this really commonplace or is it something that is less—I guess, you all are less engaged in, or is this something that you are highly engaged in?

Mr. DREIBAND. It is something we are highly engaged in, Representative Palazzo.

The right to work in this country free from discrimination includes the right to work free from national origin and citizenship discrimination, so we enforce the anti-discrimination protections that are contained in the Immigration Nationality Act. Our Immigrant Employee Rights Section initiated in early 2017 what we call the Protecting U.S. Workers Initiative. And what we have seen is that there are times when employers will discriminate because of citizenship status against American citizens, and our very dedicated career attorneys have taken very aggressive and appropriate action to remedy that when we are able to uncover it and find it.

Mr. PALAZZO. I'm sorry, something a little more direct. You say employers abuse temporary visa programs to bring in, I guess, foreign or cheaper labor at the expense of American labor, I guess that is what I was more focused on, because I do know you pursue the others heavily and rightfully so.

So I guess what industries would be using temporary visa labor to—and not use American labor, and may be abusing this process?

Mr. DREIBAND. Well, Representative Palazzo, it does vary.

Mr. PALAZZO. OK.

Mr. DREIBAND. We have seen it, for example, with respect to agriculture, for example, but it can happen in any industry really. But the right to work without regard to discrimination because of citizenship, that does extend to American citizens as well, and American citizens have a right to work in this country without employers using their citizenship as Americans against them, and we have seen that happen, as you said.

Mr. PALAZZO. That is one place we can find bipartisan support is Buy American Hire American.

So, thank you.

Mr. SERRANO. Thank you.

Ms. Meng.

Ms. MENG. Thank you, Mr. Dreiband, for being here today and for your work.

VOTING RIGHTS

Enforcement of the Voting Rights Act of 1965 has been crucial in increasing the Asian-American communities access to the ballot. How many cases have been brought by the Voting Section under the Voting Rights Act since 2017?

Mr. DREIBAND. Well, we have—as I said in my statement and I said in my written submission, we have participated in six cases under the Voting Rights Act at various levels of the Federal courts. We are currently litigating a case in Michigan under the Voting Rights Act.

And as you know, and I agree, Representative Meng, that the right to vote and the protections of the Voting Rights Act are among the most important rights that we have as Americans, they are enshrined in both the Constitution of the United States, as well as in the Voting Rights Act and in other laws as well.

Ms. MENG. How is the section, Voting Section, assigning federal observers, and how many employees are detailed as observers?

Mr. DREIBAND. Well, what we do when we decide about how to assign people is we look at through our experts in our Voting Section various polling places and jurisdictions that we think, based on the information available to us, may have been subject to problems of various kinds where there might be concerns going into an election, for example under the 2018 election, about either the right to vote, of potential discrimination related to voting, the right to language access by the voters in particular jurisdictions where under the Voting Rights Act they have a right to the ballot even if they are unfamiliar with the English language.

And so we take recommendations from our Voting Section attorneys and leadership there, and we make judgments about how to disperse our resources throughout the United States.

Ms. MENG. My second question, you have mentioned this a little, the DOJ has been enforcing the Voting Rights Act for, let's say, over 50 years now; correct?

Mr. DREIBAND. Yes. The Voting Rights Act was enacted in 1965 and the Civil Rights Division has been enforcing it for a long time.

CENSUS DATA

Ms. MENG. Has the DOJ previously used citizenship from the American Community Survey to protect voting rights?

Mr. DREIBAND. Representative Meng, I am not familiar with that, with that service, so it is not something that I know off the top of my head.

Ms. MENG. Has the DOJ lost any Voting Rights Act enforcement cases in the last over 50 years because it did not have the citizenship information?

Mr. DREIBAND. Representative Meng, I don't know the docket and the entire history of every case that the Civil Rights Division has brought since 1965. It certainly is the case generally that we don't win every case we bring, but—so I don't know the answer to your question about whether or not in the last 54 years or so we

have ever lost a case based on the data or the survey that you are referring to.

Ms. MENG. I would like to follow up with your office to see if there were cases that were lost because you did not have the citizenship information. Secretary Ross has made reference to that previously in relation to the census and the need to include a citizenship question.

LANGUAGE ACCESS

One more question, sorry, before my time expires. In the 2015 memorandum on Civil Rights Division Language Access Plan, can you update us on the continued community engagement and outreach activities the Division has undertaken to engage with limited-English-proficiency individuals and communities?

Mr. DREIBAND. Representative Meng, are you asking about like our efforts under the Voting Rights Act or—

Ms. MENG. Oh, separate. Just outreach and working together with limited-English-proficiency communities based on the 2015 memorandum that is still on your website.

Mr. DREIBAND. I see. Well, Representative Meng, we have various laws that we enforce that seek to provide language access to people of limited English proficiency. I think, in addition to the Voting Rights Act, we have a section that is very zealous with respect to language access through recipients of federal funding under Title VI of the Civil Rights Act of 1964. That law prohibits discrimination because of race and national origin, for example. And what we do see is that there are times when individuals may struggle with access, for example, to local courts or other areas where Title VI of the Civil Rights Act applies, and we do seek to enforce that.

We also enforce the Equal Educational Opportunities Act, which ensures language access for limited-English-proficiency speakers through our Educational Opportunities Section, and we enforce those laws in a variety of ways; through investigations, through settlements and, if necessary, through litigation throughout the United States.

Ms. MENG. Thank you. I know my time is up. I would love to continue working together if there are groups that can be helpful in working together with the Department.

And then, finally, if I could have 10 seconds, on your website there was a section to contact one's local FBI field office to report various types of incidents such as hate crimes, et cetera. Of the six links, only the human trafficking link is functioning; the hate crimes, excessive force, force or threats in relation to reproductive health care services, damaging religious property, and the right to vote, five out of six are not functioning. So I hope we can see those up and working soon.

Mr. DREIBAND. Well, Representative Meng, thank you for your support of the Civil Rights Division. You know, to the extent our website is not working, it is something that we will look into, and I thank you for bringing that to my attention. And we certainly look forward to your continued support and continuing to work with you.

Ms. MENG. Thank you, sir.

Mr. SERRANO. Just a bit of information for members, we will be providing the Department with any questions for the record that you may not ask here.

Mrs. Lawrence.

Mrs. LAWRENCE. Thank you, Mr. Chair.

HATE CRIMES

Under the Hate Crimes Statistics Act of 1990, the FBI is required to collect and report hate crimes statistic data from the Nation's 18,000 Federal, state, and local law enforcement officers. In 2017, the most recent data available, the FBI reported a 17-percent increase in hate crime, with increasing crime directed against individuals and institutions based on race, religion, and sexual orientation.

How has this increase impacted the business of your organization? What are you doing to address this double-digit increase in just one year?

Mr. DREIBAND. Representative Lawrence, thank you for your question.

The Attorney General has made the prosecution of hate crimes a priority of the Department of Justice and the prosecution of those crimes and the jurisdiction over those crimes is vested in the Civil Rights Division in our Criminal Section, and we have seen dozens and dozens of hate crimes throughout the United States.

First, though, I would like to address, Representative Lawrence, your point about the data. One thing that we have done and what the FBI has done is try to obtain a better and more reliable data about hate crimes reporting. There has been a challenge in the Federal Government to obtain reliable hate crimes data. There are some jurisdictions in this country, for example, that have never reported a hate crime and we know that they happened.

And so we are working to obtain and are obtaining better data about that. We then through our Criminal Section and through the FBI are investigating allegations of hate crimes. We are bringing many, many hate crimes prosecutions throughout the United States, including those involving the murder of people because of their race, because of their sexual orientation, because of their religion, because of their status as transgender individuals.

Mrs. LAWRENCE. Can you tell me, you said he has made it a priority, what actions does that result in?

So, if something is a priority, obviously we have a real issue and a problem in America, and you even address we may not have the real scope of it. So when you say it is a priority, I want to know what does a priority—how does things change in the Department? Has there been a request for additional funding? Have you increased the number of staffing to address this issue?

Because my concern is that while we are looking at data it is business as usual. So you can say something is a priority, but what are you doing to make sure that it is a priority?

Mr. DREIBAND. And, Representative Lawrence, it is an excellent question and an important issue.

What we have done are many different things. We have increased resources to our Criminal Section. When former Attorney General Sessions, for example, announced a hiring freeze at the

Department of Justice, he exempted out our Criminal Section from that hiring freeze. So we were able to continue hiring people into our Criminal Section, and to expand and increase the resources available for the investigations and prosecutions of hate crimes. We have established a website devoted to hate crimes. We are doing outreach to various individuals and organizations throughout the United States.

And we have increased significantly our focus on both investigating hate crimes and prosecuting them when appropriate, including in places like Charlottesville, Virginia, which in August 2017 we saw what I regard, at least, as a very horrific series of events that led to the death of an individual and severe injuries by dozens of others. And so, working with the FBI and the United States Attorney's Office there, we were able to obtain an indictment of an individual who was involved, we allege, in a hate crime; that case is pending. We have brought other cases, for example at the Tree of Life Synagogue in Pittsburgh, where we allege—the case is pending—we allege that an individual went into a synagogue and killed several people.

Mrs. LAWRENCE. Exactly.

My last question, Mr. Chair.

So there is an anniversary of the Matthew Shepard and James Byrd Hate Crimes Prevention Act. I am a firm believer that your responsibility doesn't lie just internally, and I am glad to hear what you are saying. What are you going to do to promote and be part of educating people on hate crimes, for being proactive? What is the role of the Justice Department in ensuring that while we have, I feel, personally, it is my belief that we have a culture that is nurturing divisiveness and hate, what is your role and how do you recognize an anniversary in this country that we are trying to prevent hate crimes?

And that will be my last question.

Mr. DREIBAND. Representative Lawrence, I agree with you, I think we have a very serious problem in this country. We have what we call the Hate Crimes Enforcement initiative, and we have outreach to local police and community leaders to deal with this issue. The Justice Department and the Civil Rights Division in particular is primarily a law enforcement agency, and so we are charged with and take very seriously our responsibilities under the Shepard-Byrd Hate Crime Prevention Act of 2009. We are devoting more resources to enforcement of that law.

And we are seeking through both our enforcement efforts, our outreach efforts, and our initiative to do everything we can to eradicate hate crimes and hatred from this country.

Mrs. LAWRENCE. I close with this, I hope that includes training staff too on when you look at prosecuting hate crimes that—the biases that inherently are in our system, that we train to remove those biases as well.

Thank you. I yield back.

Mr. SERRANO. Mr. Crist.

VOTING RIGHTS

Mr. CRIST. Thank you, Mr. Chairman. And thank you for being here today, Mr. Dreiband.

As you probably are aware, this past November an overwhelming majority of Floridians, nearly 65 percent in fact, passed Amendment IV, restoring the right of over 1.4 million Floridians to vote. It was a great day, one that ended a dark chapter of Jim Crow-era politics in Florida.

As Governor of Florida, I was proud to restore the voting rights of over 155,000 nonviolent felons, because I believe in forgiveness and I believe in second chances, and that voting is in fact a civil right.

And I was curious, do you believe that voting is a civil right in our country?

Mr. DREIBAND. Representative Crist, yes, I believe that voting is a civil right in our country and in fact, more than that, it is something that is enshrined in the Constitution of the United States and in our Federal laws, including in particular the Voting Rights Act.

I think one of the most important constitutional amendments in our history is the Fifteenth Amendment to the Constitution, which guaranteed the right to vote to individuals who were then experiencing and have since experienced significant race discrimination in this country, including especially with respect to their right to vote, and the Voting Rights Act I think reinforces that as well.

Mr. CRIST. Thank you, sir. I am encouraged by that and I appreciate your answer.

Do you think there should be a Federal policy then to restore the rights of nonviolent felons to vote after they have paid their full debt to society?

Mr. DREIBAND. Representative Crist, as I said, the right to vote is one of the most important rights that we have, it is fundamental to who we are as a democracy. With respect to the rights of felons to vote, that really is up to lawmakers around the various states in this country, and you and your colleagues in the Congress.

Our duty at the Civil Rights Division is to enforce the laws within our jurisdiction, including the Voting Rights Act and the National Voter Registration Act, the Help America Vote Act, and other laws. Right now we do not have a law that we are trusted with enforcing that seeks to address that issue, but it is something that really is up to lawmakers in this country. And our duty at the Civil Rights Division is to enforce the laws within our jurisdiction and that is what we do.

Mr. CRIST. Is it also to enforce the Constitution?

Mr. DREIBAND. Yes, of course.

Mr. CRIST. Didn't you cite that because of the federal Constitution that there should be protections of voting rights and shouldn't that extend to those who have paid their debt to society?

Mr. DREIBAND. Representative—

Mr. CRIST. I mean, do you have to have a law? I don't mean to interrupt, forgive me. I'm sorry.

You cited that it would be nice to have a law, I agree, but we also have a Constitution. And if the Constitution would extend that right and give that right to your Department, wouldn't it be appropriate to enforce that nationwide—

Mr. DREIBAND. Representative—

Mr. CRIST [continuing]. Under the Constitution?

Mr. DREIBAND. Yes, Representative Crist, certainly constitutional rights are the most fundamental rights we have in our country and, if the United States were to amend the Constitution to extend a constitutional right to convicted felons, then that would broaden the right to vote to those individuals and would enshrine it in the Constitution.

Right now, the Constitution does not address that issue, as far as I know anyway, but it is something that I think you and your colleagues in the Congress and at the various state legislatures across the country can consider and decide how to proceed.

Mr. CRIST. Thank you. I'm not sure how much time I have left, but I have another area of a little bit?

Mr. SERRANO. One minute.

EMPLOYMENT DISCRIMINATION

Mr. CRIST. One minute. As you know, the Department of Justice filed a brief in the case of *Zarda v. Altitude Express*, arguing that Title VII of the Civil Rights Act does not protect an employee from being discriminated against on the basis of their sexual orientation. From my understanding, this interpretation runs counter to the previous administration's interpretation.

Can you explain to me the impetus for the decision making and the change, and why did the Department decide to reverse course?

Mr. DREIBAND. Well, Representative Crist, the brief that you are referring to was filed by the Department in I think in 2017, before I joined the Department, so I did not personally participate—

Mr. CRIST. That is correct.

Mr. DREIBAND [continuing]. In that brief.

Mr. CRIST. You are correct.

Mr. DREIBAND. Generally speaking, Title VII of the Civil Rights Act is the law that was at issue and is at issue in that case. That case, as I think relevant to your question, protects applicants for employment and employees, and even former employees, from discrimination because of sex. The Federal Courts of Appeals have split on the question of whether or not the sex discrimination prohibitions of Title VII of the Civil Rights Act of 1964 extend protections because of sexual orientation. That case, as well as other cases presenting similar issues, are currently pending at the Supreme Court of the United States and we look forward to the Supreme Court's decision. And we remain fully committed to enforcing the protections of law with respect to sex discrimination and the other protected categories contained in Title VII.

Mr. CRIST. You are aware—and this will be it, Mr. Chairman, in February of 2018 the United States Court of Appeals for the Second Circuit ruled in *Zarda's* favor, arguing that Title VII prohibits sexual orientation employment discrimination under the category of sex.

Mr. DREIBAND. Representative Crist, yes, I am aware of the decision by the United States Court of Appeals for the Second Circuit in the *Zarda* case. As I mentioned, that case then is now pending before the Supreme Court of the United States, it has been pending up there since or shortly after the Second Circuit issued its decision, and we will see what the Supreme Court does with it.

Mr. CRIST. Thank you, sir.

Thank you, Mr. Chairman.
Mr. SERRANO. Thank you.
Mr. Case.

CIVIL RIGHTS DIVISION ENFORCEMENT ACTIONS

Mr. CASE. Thank you. Mr. Dreiband, there was an extensive article in Vice News about six days ago that I am looking at right now. It was by a gentleman named Rob Arthur. The title was, "Exclusive: Trump's Justice Department is Investigating 60 Percent Fewer Civil Rights Cases Than Obama's." The lead paragraph says, "The Trump Administration is pursuing far fewer civil rights cases, including hate crimes, police bias, and disability rights cases than the Obama or Bush administration did, an exclusive Vice News analysis of DOJ data shows."

The second paragraph says, "The DOJ Civil Rights Division, which has enforced nearly every pivotal moment of rights reform since its creation in '57 has started 60 percent fewer cases against potential violations and 50 percent fewer than both, Obama and Trump."

And it purports to be based on—for the objective facts in here, it has got plenty of subjectivity in it, as you can imagine, but the objective facts purport to be based on actual DOJ status, mostly on-line. Are you familiar with this article? Have you read it?

Mr. DREIBAND. Representative Case, no, I am not familiar with the article and the description of the Civil Rights Division that you just read to me is inconsistent with what I have seen since I joined the Department.

Mr. CASE. OK. So, you haven't read about it and you haven't heard about it?

Mr. DREIBAND. I have not read the article. It is possible I may have heard of the article, but I haven't read it.

Mr. CASE. Is there some way that we can talk apples-to-apples about whether, in fact, enforcement actions have increased, declined, or remained stable over time? I mean, I understand—in my understanding of enforcement actions, the limited understanding, is that an enforcement action results from a formal investigation, so, in other words, an actual formal action by DOJ for a potential civil rights violation. Would we be on the same page if we talked in those terms?

Mr. DREIBAND. Well, Representative Case, I think it would depend on the statute and the type of case. Each of the statutes within our jurisdiction have enforcement mechanisms and procedures that vary from statute to statute. So, it is hard to compare, for example, some statutes where we routinely settle matters civilly, for example, with a criminal investigation, or matters where we frequently litigate.

Mr. CASE. How would you define an enforcement action? How would you define an enforcement action?

Mr. DREIBAND. Well, I would define an enforcement action first by looking at the particular statute that we might discuss.

Mr. CASE. OK. Let's just start with that. Let's accept that definition. I accept that. Have those enforcement actions, whatever the statute is, whatever the department is, have they gone up? Down? What is happening to the actual enforcement actions? Because the

subjective conclusion of this article—and it is not a new conclusion; this has been out there for a while—the suspicion and fear of many that this administration is not ignoring our civil rights statutes to the same degree as Republican and Democratic presidents previously, and has some degree of animus, even, to the enforcement of civil rights statutes in some areas, at least.

How do you respond to that? What is the empirical evidence to disprove that?

Mr. DREIBAND. Well, Representative Case, I think it is very unfortunate that anyone would believe the type of myth that you just described. The notion that the Civil Rights Division is hostile to civil rights is deeply insulting to me and to my colleagues at the Civil Rights Division and it is simple untrue.

Mr. CASE. OK. How would—

Mr. DREIBAND. With respect to enforcement actions, I can cite, for example, the fact that our human-trafficking prosecutions in the most recent four-year period are up by an eighty-two percent number from the prior four-year period. I could also point to the fact that the Civil Rights Division, since 2017, has brought a record number of investigations and patent or practice lawsuits under our Sexual Harassment in Housing Initiative under the Fair Housing Act. I could point to dozens and dozens of hate crimes prosecutions that we have brought. I—

Mr. CASE. I am prepared to accept the empirical evidence that you are, in fact, you know, enforcing the civil rights statutes. I am just concerned that there is so much out there, some of which purports to be based on very objective evidence from the DOJ saying that is not the case. It may be the case in some of your departments, but it may not be the case in others.

So, what I am trying to get to the bottom of is, is this unfair or not? I mean, what do the facts actually show about whether this administration and this DOJ is continuing to vigorously enforce the civil rights acts, as prior administrations have; that is the basic question that I have.

Mr. DREIBAND. And, Representative Case, I think it is an excellent question, and I am here telling you that the message that I have given to our career staff in the Civil Rights Division since I joined the department, which was in November of 2018, is that we support and will continue to pursue aggressive and zealous enforcement of the civil rights laws. That includes all of the laws within our jurisdiction. We do have limited resources, so we have to make judgments about how to deploy our resources. So, numbers may vary.

But this notion that there is some kind of hostility towards the civil rights laws is wholly inconsistent with everything that I have seen since I have joined the Department of Justice and it is—

Mr. CASE. OK. How many attorneys do you have right now?

Mr. DREIBAND. We have—I don't recall the exact number; I mentioned it, it is in my statement—approximately 370 attorneys or thereabouts. It is a rough number.

Mr. CASE. OK. Fiscal year—I am just looking at your own information—fiscal year 2019, continuing resolution, 369 attorneys, allegation is that you are having a little higher than normal non-retention; in other words, people are leaving and are not being replaced.

I don't know if that is correct or not, but I do note in your fiscal year 2020 budget request, you have only asked for an additional two attorneys. So, that means to me either you think you are fully staffed or you don't have any—you know, you are not seeing an increase in enforcement actions or some other reason that I am not sure.

What explains—to me, it strikes me as unusual that we are seeing only a two-attorney increase, when we feel so much apparent, you know, increase—I don't know if this is justified or not—but there feels like more interest, more demand for the U.S. Government to enforce civil rights actions and, yet, the attorney load that you are asking for is not very significant.

Mr. DREIBAND. Well, Representative Case, of course, the budget is something that you and your colleagues will determine. I note here, for example, that in fiscal year 2017, we had—the numbers that I have in front of me are 278 attorneys and that number went from 278 to 369 in 2018, stayed that way in 2019, and we are asking or projecting for 371, as you say.

Obviously, we, in the Civil Rights Division do have limited resources. It is up to you and your colleagues, here in the Congress, to determine, you know, how much money to appropriate to us. So, that is a judgment for you to make.

Mr. CASE. Is that your judgment that plus-two attorneys is sufficient for your needs to enforce our civil rights statutes?

Mr. DREIBAND. That, Representative Case, that is the proposal and we will certainly do our best to enforce these laws within our jurisdiction and use the limited resources that we have—obviously, the Government does not have unlimited resources—and you and your colleagues on this subcommittee and in the Congress need to make judgments, given the competing demands that you have about how to allocate the taxpayer dollars, and we will do everything I can with the resources that you and your colleagues decide to appropriate to us. We very much appreciate your support, as well as those of your colleagues, and we remain committed and will be committed to enforcing the civil rights laws.

Mr. CASE. Thank you.

Mr. SERRANO. Ms. Kaptur.

Ms. KAPTUR. Thank you very much, Mr. Chairman.

Welcome Mr. Driehaus—excuse me—Dreiband. We had congressman and mayor from Cincinnati named Driehaus.

CONSENT DECREES

Attorney General Sessions issued a memo right before he left limiting the use of consent decrees in civil rights enforcement cases; that was his last act in office. And I am curious, we know that those instruments put all parties on the record and I wonder what the impact of his memo has been to date. How many consent decrees, to your knowledge, have been entered into by the Civil Rights Division by this administration by section?

Mr. DREIBAND. Representative Kaptur, if I am pronouncing that correctly, you are correct that former Attorney General Sessions did sign a memorandum about consent decrees. That memorandum is limited to consent decrees with state and local government institutions—cities, counties, states, things of that nature—that memo-

random established a process internally at the Justice Department for both, standards that govern consent decrees and the promise for obtaining approval of consent decrees in the department. They apply to both, the Civil Rights Division and to all other litigating components of the department.

In terms of consent decrees versus other forms of resolving disputes, the way that works and the way we use them is that we use consent decrees, as well as settlement agreements, to resolve a dispute in our civil prosecution of the federal civil rights laws. They do vary in the type of settlement that we seek to obtain in particular cases. So, we have both, settlement agreements and consent decrees, and we use them as best we can using our judgment.

With respect to your particular question about section by section, I don't know the numbers off the top of my head. We have 11 sections in the Civil Rights Division; 10 of those 11 involve civil-type claims. One is a policy section that does not litigate cases, but the other ones do litigate cases, civilly. Our Criminal Section, of course, they bring indictments and guilty pleas and things like that and convictions.

So, with respect to consent decrees, our civil-litigating sections use them and we use them frequently to usually settle matters that are filed in federal courts.

Ms. KAPTUR. Could you have your staff prepare those numbers? How long would it take you to submit that to us, on behalf of this administration?

Mr. DREIBAND. I'm sorry, how long—I don't—Representative Kaptur, I'm not sure how long it would take. I would have to take that back to the Department of Justice and see what kinda that we have about it.

Ms. KAPTUR. All I am asking is for this administration, by section, how many of the consent decrees have been entered into by the Civil Rights Division, how many by section. That should be fairly easy during this administration, since it has been sworn in.

Mr. DREIBAND. Representative Kaptur, I will look into that and take that back to the Department and do what—find out what we can find out for you on that. We certainly appreciate your support and continue to work with you and your colleagues on this subcommittee and here in the Congress.

FAIR HOUSING ACT

Ms. KAPTUR. Thank you. I just wanted to move to the housing arena, if I could, on an area I have a great interest in. The housing section does not appear to have brought a single fair-housing case based on race discrimination in this administration. Perhaps my information is not up to date. Why—could you possibly explain this and why would the Department of Justice be ignoring the law, a powerful tool that this particular section provides us? Do you not have any lawyers in that section?

Mr. DREIBAND. Representative Kaptur, we enforce the Fair Housing Act through our Housing and Civil Enforcement Section. We have several dozen lawyers in that section and with respect to the different kinds of cases they bring, they, of course, as I mentioned earlier, have brought a record number of sexual harassment investigations and pattern and practice sexual harassment cases. With

respect to race discrimination cases under the Fair Housing Act, I have instructed them that I regard race discrimination protections under the Fair Housing Act as very important and something that I fully support. And I work with them to do that and to bring those cases, as well. It is something that we are working on and we are investigating and litigating all kinds of cases through our Housing and Civil Enforcement Section. And not just with respect to race and sex discrimination, but on behalf of individuals with disabilities and on behalf of other protected categories, as well.

Ms. KAPTUR. Well, it is from the data I have—and, again, it could be wrong—but it appears that the housing section has not brought a single Fair Housing case in two years since the administration took office based on race discrimination. Is that possible?

Mr. DREIBAND. Representative Kaptur, that does not sound correct to me. I don't have the data as I am sitting here today, but, certainly, race discrimination protections of the Fair Housing Act, I think, are among the most important protections embodied in the Fair Housing Act. In fact, the Fair Housing Act was passed in 1968 primarily to get at race discrimination in housing, and that law passed shortly after the terrible and tragic assassination of Dr. Martin Luther King, Jr., and it was designed to eradicate race and other forms of discrimination in housing.

I know, as I say, we have seen a significant increase in sexual harassment, in particular, in housing. And these are very disturbing cases where what we often see are male landlords who coerce, threaten, intimidate very often, low-income and vulnerable women into threats of sexual favors in exchange for rent or rent discounts, things of that nature, and we are prosecuting a record number of those.

Ms. KAPTUR. Thank you for that.

Mr. DREIBAND. Sure. And we also receive referrals from the Department of Housing and Urban Development where we prosecute those cases, as well, through our Housing and Civil Enforcement Section.

Ms. KAPTUR. And the way you are structured, do you have someone in charge of the housing litigation; is there someone within—

Mr. DREIBAND. Yeah, the structure of our—of the Civil Rights Division, with respect to our Housing and Civil Enforcement Section, is that we have a deputy assistant attorney general who reports to my principal deputy and to me. He is a career attorney who has been at the Department for more than 20 years. Then, we have an individual who is the chief of our Housing and Civil Enforcement Section. She, likewise, is a career attorney and she reports to our deputy assistant attorney general, and the two of them, working with me and the other people in our Housing Civil Enforcement Section and the leadership of that section, investigate and litigate allegations of housing discrimination, among other things.

Ms. KAPTUR. Thank you. So, it would be easy for you to get back to us fairly quickly on whether what I stated is correct, and that is that the administration has not brought a single housing case, Fair Housing case based on race discrimination in this administration. You could check with that person and get back to us fairly quickly, right, so you can verify what I am saying is true?

Mr. DREIBAND. Well, Representative Kaptur, certainly, I can check with the leadership of our Housing and Civil Enforcement Section—

Ms. KAPTUR. Thank you.

Mr. DREIBAND [continued]. And, in fact, I talk with them frequently. I have met with them several times this week, for example.

Ms. KAPTUR. Well, you know, Jones Day has a big legal operation in Cleveland, Ohio, also, and I would be very, very interested in the answer to that question, sir. Lou Stokes is one of my predecessors from Ohio and he was very intent on this issue, and I admired his work and the work that we have done as a country to heal these racial divides. So, I would be very grateful for that information.

Thank you, Mr. Chairman.

Mr. SERRANO. Thank you.

POLICE REFORM

Mr. Dreiband, how much staffing and funding does the Division devote to police reform?

Mr. DREIBAND. Well, I would say two of our sections primarily deal with police departments through the Civil Rights Division, our Special Litigation Section and our Criminal Section. But, of course, other sections of the Justice Department and the Civil Rights Division also do it, as well. For example, police departments are governed by Title VII of the Civil Rights Act of 1964 in that they are prohibited from discrimination because of race, sex, and other protected traits and our Employment Litigation Section enforces that law. So, it does vary by statute.

Each of those sections, the three sections that I mentioned, have several dozen attorneys and investigators and other professionals who work with them.

Mr. SERRANO. Now, from your knowledge, is that particular dedicated funds amount lower than it is been in the past years? Has it held steady over a period of time?

Mr. DREIBAND. Well, I think the numbers vary. They vary from section to section in terms of increases or decreases in staffing. Some sections have more attrition than others. So, for example, our Criminal Section has seen an increase in staffing over the last couple of years, but it does vary by section.

Mr. SERRANO. And how many reform agreements are now in place and how many are under consideration, either in negotiation or in implementation?

Mr. DREIBAND. Chairman Serrano, I'm sorry, what kind of agreements were you asking about? I did not quite hear that.

Mr. SERRANO. Reform agreements.

Mr. DREIBAND. Well, Chairman Serrano, we enter into different kinds of agreements with police departments. They could be in the form of a settlement agreement of a disputed matter. They could be in the form of a consent decree, as I was talking earlier. So, it does vary in terms of the form of the agreement.

We don't use the term "reform agreement" when we settle a matter with a police department or any other organization or institution. So, it does vary in terms of the type of resolution that we have

with these organizations. But—so, I am not sure I can define it more precisely than that.

Mr. SERRANO. You mentioned consent decrees and we have an understanding that there have been less than those agreed to; is that correct?

Mr. DREIBAND. Chairman Serrano, I don't know the numbers of consent decrees that this Civil Rights Division has entered into. We have entered into many, many consent decrees through the various sections of the Civil Rights Division over the last few years, many of which predate my arrival, obviously. So, I don't know the numbers off the top of my head. I think it would vary from section to section of the Civil Rights Division.

Mr. SERRANO. OK. Well, you can provide that on the record and we will also provide you with more information to clarify our questioning.

Mr. DREIBAND. Thank you, Chairman Serrano.

CONSENT DECREES

Mr. SERRANO. On November 7th, former Attorney General Sessions initialed a policy memo to curtail the use of your consent decrees saying that it is not the responsibility of the Federal Government to manage non-Federal law enforcement agencies.

Has the policy been implemented and did it lead to terminating agreements or setting deadlines?

Mr. DREIBAND. Chairman Serrano, you are correct that on November 7th of 2018, then-Attorney General Jeff Sessions did sign a memorandum about consent decrees with respect to state and local government institutions. That memorandum established certain kinds of procedures, both, with respect to obtaining approval of consent decrees and standards that govern consent decrees.

The memorandum has not resulted in any kind of artificial termination of any consent decree within the jurisdiction of the Civil Rights Division since it issued, nor have I given any direction to anyone in the Civil Rights Division to terminate any existing consent decree, artificially or otherwise, as a result of that memorandum. So, consent decrees that existed before that memorandum and that have not yet otherwise expired, remain in place and our various sections of the Civil Rights Division continues to enforce them.

You know, we do consult, as a result of the memorandum, with the Office of the Associate Attorney General, for example, or the Deputy Attorney General, as appropriate, and we are continuing, though, marching on and soldiering on with respect to our law enforcement activities.

Mr. SERRANO. Then you wouldn't know how many agreements were affected and where they were affected?

Mr. DREIBAND. Chairman Serrano, I did not hear the last part of your question.

Mr. SERRANO. And you wouldn't know how many of these agreements were affected and where, at this point?

Mr. DREIBAND. Yeah, Chairman Serrano, in terms of the existing agreements, I don't believe that any of them were affected at all. We don't read that memorandum to be retroactive or anything like that to affect pending consent decrees; rather, it was a directive,

at least as I read it, on a going-forward basis, about how the Civil Rights Division, but not just the Civil Rights Division, but the Justice Department, generally, will seek to obtain consent decrees, with respect to state, local government organizations, and institutions, respecting, of course, the federalism concerns that are at issue in those cases, because when we have, you know, state and local government organizations and the federal government bringing enforcement actions in those cases.

Mr. SERRANO. In your confirmation hearing, you testified that—and I am quoting, “The division, Special Litigation Section, is entrusted with the role of enforcing Federal laws, protecting the civil rights of individuals in our communities who interact with state or local law enforcement officers.”

You also said, “That while intervention may not be appropriate in every case, the Division will stand ready and willing to assist State and local authorities, when necessary.”

With that in mind, what standards should DOJ use to identify organizations in need of review or reform?

Mr. DREIBAND. Yeah, we, through our Special Litigation Section, we enforce a variety of statutes and we gain information about alleged violations of statutes in different ways, through local communities, through advocacy groups, through individuals. Our Special Litigation Section then conducts investigations, as appropriate; again, each law varies from—in terms of the exact process available to us.

For example, some statutes provide subpoena power during investigations in civil matters and others do not. For example, the Civil Rights of Institutionalized Persons Act, which is one of the laws that the Special Litigation Section is entrusted with enforcing, that does, thanks to amendments by you and your colleagues in the Congress, does authorize us to issue subpoenas, for example, to compel production of information.

Under that law, for example, we recently issued findings, letters against both, a jail in Kentucky and a prison in Virginia, where we found that there was a pattern of practice of violations of the Constitution by law enforcement officials in those cases and we are—and those occurred after lengthy and thorough investigations by the very dedicated staff and attorneys in the Special Litigation Section of the Civil Rights Division, and we are now working with those institutions, hopefully, to bring about a resolution to those alleged violations and to make sure that in those cases, the institutions are complying fully with the Constitution of the United States and the federal civil rights laws that—within our jurisdiction.

Mr. SERRANO. Thank you.

Mr. Aderholt.

Mr. ADERHOLT. Thank you, Mr. Chairman.

HATE CRIMES

We talked—I think we talked a little bit about the prosecution of hate crimes, but let me ask you about the incidences of hate crimes, in general. Did—and you may have mentioned this—but clarify this, would you say that the instance of actual crimes are growing, staying the same, or decreasing?

Mr. DREIBAND. Ranking Member Aderholt, with respect to hate crimes, I think what I can say is that we think the data are improving; in other words, the reporting of hate crimes and the data available to us is better and getting better, and it is something that the Federal Bureau of Investigations is working very hard on, along with our Criminal Section at the Justice Department. So, the data are better, which is helpful.

In terms of an accurate measure of how many hate crimes are occurring in this country, I think that is more difficult to say. As I said earlier, we are concerned that there are jurisdictions in this country that have not reported hate crimes at all and, yet, we are confident that those hate crimes are occurring.

So, I think the good news is that the data are better and we are committing more resources to prosecuting hate crimes, to reaching out to local law enforcement and community organizations and individuals to uncover instances of hate crimes and to take appropriate action where——

Mr. ADERHOLT. So, it may not be that the number of actual hate crimes are growing so much, as there is better information regarding incidences that are out there are being reported more now than they were in the past; is that safe to say?

Mr. DREIBAND. Ranking Member Aderholt, yes. I think, as I said, the data are better, and that improvement in the data enables us to identify hate crimes and investigate them, and when appropriate, working with local law enforcement to bring appropriate actions, including criminal prosecution, of those who commit such crimes.

Mr. ADERHOLT. Let me shift just a bit. I will talk about hate crime hoax and, of course, they can be as damaging as actual hate crimes. Or still, hate crimes hoaxes compound the injury by unjustly defaming the category of individual identified with the perceived of the characteristics of the perpetrator or perpetrators.

Has your division ever been involved with the prosecution of a hate crime hoax?

Mr. DREIBAND. Representative Aderholt, I am not familiar of whether or not the Civil Rights Division has ever prosecuted a hate crimes hoax. I agree with you that any kind of hoax about a hate crime is a very serious thing and can damage public perceptions about victims of hate crimes. They can also involve criminal misconduct, as well, if, for example, an individual is falsely reporting a hate crime, may make a material false statement to an FBI agent, for example, that is a felony.

Likewise, if an individual goes into a grand jury or otherwise testifies under oath falsely about a hate crime, that, likewise, would be criminal perjury and could be prosecuted. So, these are very serious things, but they are also serious from the standpoint of public confidence in criminal justice and I think they seek to undermine the victims of hate crimes when people perpetrate hoaxes about them.

RELIGIOUS LIBERTY

Mr. ADERHOLT. Public colleges and universities are, of course, bound by the Constitution, since they are institutions of government, yet, freedom of speech and religious liberty come under at-

tack far too often on public campuses. What responsibilities do public institutions have to afford equal access to facilities and resources for faith-based student organizations, including organizations that promote viewpoints that are unpopular with the leadership of the university itself?

Mr. DREIBAND. Well, Ranking Member Aderholt, religious liberty is, like voting, one of the most important protections that we have in the Constitution of the United States. It is something that the founders enshrined in the First Amendment to the Constitution of the United States, including, in particular, the free exercise of religion, and it is something that public institution, because they are governmental organizations, have a duty to comply with and to respect the free exercise of religion of those individuals within their community.

We have seen in the Civil Rights Division that there are times when certain public institutions are taking actions that we regard as in violation of the First Amendment. For example, we had a case recently, a case called *Business Leaders in Christ v the University of Iowa*, where the University of Iowa de-registered a religious student group, and we concluded that it did so in violation of the First Amendment.

We filed with the Federal District Court in Iowa, a statement of interest explaining the standards that govern such claims and the Federal Court there did agree with us, found that the University of Iowa had violated the First Amendment with respect to this religious student group there, and we have seen that in other circumstances, as well.

Mr. ADERHOLT. Well, that was going to be my next question. So, that has been a recent effort that you all have worked on there with that University of Iowa case?

Mr. DREIBAND. Ranking Member Aderholt, yes. That is one case of various cases where we, at the Civil Rights Division, have found that various public institutions appear, at least, to us, to have violated the First Amendment religious liberty protections. And what we do and have done in those cases, typically, is to advise the federal courts of this and advise them of the standards that govern and the standards that these public institutions should adhere to. And then, you know, the courts take appropriate action in whatever cases are pending.

Mr. ADERHOLT. And I am sure that in this particular case, the University of Iowa took the appropriate action and let this group back on the campus?

Mr. DREIBAND. Well, I don't know what the University of Iowa has done. The decision was issued very recently, and so I don't know whether the University of Iowa has come into compliance with the First Amendment. I certainly hope they have.

What we do know is that the Federal Court in that case did agree with us and issued a decision, a very thorough decision, about the violation of the First Amendment that it found.

Mr. ADERHOLT. What Federal Court was it that issued that ruling; do you recall offhand?

Mr. DREIBAND. Yeah, it was—it was a federal court in Iowa. I don't remember which district court it was, but it was in the state of Iowa.

Mr. ADERHOLT. All right. Thank you, Mr. Chairman.

Mr. SERRANO. Mr. Palazzo.

Mr. PALAZZO. All right. Thank you, Mr. Chairman.

RIGHTS OF SERVICEMEMBERS

In your testimony, you talk about protecting the servicemembers' rights to vote and also their reemployment rights when they deploy. And we know over the past two decades, we have had hundreds of thousands of men and women deployed all over the nation, primarily in the Middle East.

Can you briefly describe your efforts and are they transpositive or negative, again, in employees and employers and states, I guess, in one sense, making sure that they are able to vote when they are serving overseas, but also, their reemployment upon returning home, just what you have seen in your office and are we turning them in the right direction?

Mr. DREIBAND. Yes, we have, as I mentioned in my written submission, Representative Palazzo, we did—we are focused on protecting servicemembers against discrimination and against deprivation of their rights to vote. So, we enforce a law called the Uniformed Services Employment and Reemployment Rights Act, as well as two other laws, I think, that are relevant to protections, at least within our jurisdiction, for servicemembers, the Uniformed and Overseas Citizens Absentee Voting Act—that protects the right of servicemembers who are outside the United States to vote—the Servicemembers Civil Relief Act also provides protections.

For example, we have seen cases where certain auto lenders have seized property in violation of the Servicemembers Civil Relief Act, foreclosed on mortgages, things like that, when our servicemembers are outside the United States or might even be fighting in a place of combat. Under the Uniformed Services Employment and Reemployment Rights Act, USERRA is what that law is known as, we have seen instances where servicemembers have lost their jobs, in violation of the law, or have otherwise suffered adverse employment consequences. And so, when we found that—and we have found it—we take appropriate action, including up to and filing lawsuits against individuals or organizations that may violate these protections.

Mr. PALAZZO. As the chairman of the National Guard and Reserve Components Caucus, and as a veteran myself, and a current member of the Mississippi National Guard, we have over—in fact, we have the largest contingent of National Guardsmen returning from overseas. They spend a year in the Middle East, and we have another group from Laurel, the 184th Sustainment Command that is in the middle of their deployment.

You know, these things are important and, you know, I just want to thank the employers that continue to hire National Guardsmen and Reservists, especially in light of the tempo that we have had over the past 20 years. It is really admirable of them, and, in fact, in Congress, we have tried to make it even more appealing by providing tax credits for those who hire men and women in uniform and that are deployed to help, again, just incentivize people to continue hiring men and women in uniform, because they do make some of the best employees out there.

You know, we have kind of focused on protecting the right to vote. Protecting, you know, the American citizens vote is extremely important to me. Just last week on HR1, which I think it is called For the People's Act, and some people think it is for the politician's act, more of an incumbent protection program, I mean, we heard crazy things like reducing the voting age to 16, you know, allowing—you know, we actually had, I guess, a motion to recommit or a statement to, you know—and it was by Congressman Dan Crenshaw to basically prohibit people who are here illegally from voting in our federal elections, but many of my colleagues thought that it was okay for people who are here illegally to vote in federal elections.

And when you look at California, California actually has local ordinance that allows not only illegals to obtain driver's licenses, but to vote in local elections. What are we doing to protect our vote? Because I think it sends a horrific message, and are we doing anything to go after the voter fraud in these cities by—because, basically, they are in direct violation of federal law. Because I am assuming if they are voting in local elections, they are voting in federal elections, as well.

Mr. DREIBAND. Well, Representative Palazzo, first, let me address your comments about our servicemembers, with which I agree. Our very dedicated women and men who put on a uniform are willing, literally, to put their lives at risk to protect the liberties we have in this country. This is a tradition that goes back to the Continental Army and during the American Revolution, as you know, and they do so, among other things, protect the right to vote.

And I think when we see violations of that right, it is something that the Justice Department takes very seriously. In the Civil Rights Division, we are entrusted with enforcing the civil rights protections related to voting. Voter fraud, when it happens, is within the jurisdiction of the Criminal Division of the Justice Department.

And, you know, my focus, as the head of the Civil Rights Division, of course, is to focus on the laws within our jurisdiction, but I do know that we have many very fine lawyers in the Criminal Division at the Justice Department and they work with the FBI to investigate any claims or allegations of voter fraud when they happen. It is not something that I am personally involved in because, as I said, because of the jurisdiction that we have in the Civil Rights Division, but I agree with you that it is an important issue and it is one that we should all be concerned about as Americans.

Mr. PALAZZO. Thank you for your public service and thank you for coming out today. I appreciate it.

Mr. DREIBAND. Thank you, Representative Palazzo.

Mr. SERRANO. I can't let it pass. My good friend, and I mean my good friend, Mr. Palazzo, no democrat supported undocumented folks voting in elections. It is a good approach that is used. Every time we bring up voter suppression, all the difficulty that is made in some States for you to vote, then the other side brings up voting by undocumented.

I don't know what it feels like to be an undocumented person; I was born a citizen in a territory, but everything I know about these folks is that they would rather stay in the shadows. The last thing they want to do is get caught in an election that they are not supposed to be voting in, because that would be the end of their stay here or worse, they would stay here under another circumstance: behind bars. So, I don't think that that is something for us to worry about.

COMMUNITY RELATIONS SERVICE

Let me ask you one last question and then we will wrap it up and let you go enforce the laws. Fiscal year 2019 proposed to put the Community Relations Service in your division. Is this a good idea in your opinion?

Mr. DREIBAND. Well, the Community Relations Service, historically, has been separate from the Civil Rights Division. I understand there is a proposal to make it a part of the Civil Rights Division. The Community Relations Service, historically, has served a different function than we do in the Civil Rights Division in that the Community Relations Service has historically helped work with communities in an amicable way to calm tensions, to build trust often times when there have various controversies in a particular community.

And the Civil Rights Division, as I said earlier, and you referenced, Chairman Serrano, we are primarily charged with enforcing the laws within our jurisdiction through either criminal prosecution or civil lawsuits or investigations, things of that sort.

So, with respect to the proposal, I really think that is something that you and your colleagues, here in the House of Representatives and your peers over in the United States Senate should decide, and whatever you decide and whatever you do, we will do our duty as best we can. And if you decide, and your colleagues decide to combine the Community Relations Service with the Civil Rights Division, we will do our best to make sure that both, the Community Relations Service and Civil Rights Division can continue to function as best and as efficiently as they can, given the limited resources that you and your colleagues appropriate to us.

Mr. SERRANO. Thank you.

Mr. Aderholt, do you have any closing comments?

Mr. ADERHOLT. I don't have anything else.

Mr. SERRANO. Let me just thank you for being here with us today and I will end the way I started. You know, I come from a generation of people who saw the Justice Department as the one place you went to for relief and every time the Justice Department got involved, it was not to hurt someone unless someone was doing something wrong; it was to defend the rights of people and even those who were in the margins of society, in many ways—financially and, otherwise—felt protected.

And as I said before, for the African-American community, it became the one place, especially, where the justice could be brought about. And I would hope that that is still the feeling. I would hope that that is what you consider to instill in the people who work in this section and I would hope that we can continue to have a Jus-

tice Department that we can remedy what is wrong, grow on what is right, and serve the people well. And I thank you.

Mr. DREIBAND. Thank you, Chairman Serrano.

Mr. SERRANO. And this hearing is adjourned.

The Honorable José E. Serrano
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

Civil Rights Division Oversight Hearing

Foreign Interference in Elections

1. The Voting Section of the Civil Rights Division (CRT) undertook its usual election-related work in 2018 following controversial 2016 elections, in which foreign interference seemingly impacted our democracy. It monitored polling places, received and acted on election-related complaints under statutes it enforces. **In 2018, how many Voting Section personnel deployed outside of D.C.? Where did they go?**

ANSWER: As the Department publicized in a press release issued on November 5, 2018, the Civil Rights Division deployed personnel from across the Department of Justice to 35 jurisdictions in 19 states. More information is available in the press release at <https://www.justice.gov/opa/pr/justice-department-monitor-compliance-federal-voting-rights-laws-election-day>.

2. **How did Voting Section engagement in 2018 compare with its operations in the 2016 election, in type and number of enforcement actions?**

ANSWER: The Department of Justice did not file a single voting rights lawsuit in 2016. In 2016, the Department filed no lawsuits under the Voting Rights Act, including Section 2 of the Act, or under any other federal law that protects the right to vote. By contrast, in 2018, the Department of Justice filed three lawsuits under federal voting laws to protect the right to vote. The Department filed two of those lawsuits, *United States v. Wisconsin* and *United States v. Arizona*, under the Uniformed and Overseas Citizens Absentee Voting Act to protect the voting rights of military and other overseas citizens. The Department filed the third lawsuit, *United States v. Kentucky*, under the National Voter Registration Act to protect voting rights by guaranteeing appropriate maintenance of state voter rolls.

3. **How many complaints or alleged violations did CRT investigate or act on in 2018?**

ANSWER: The Department of Justice takes all complaints and alleged violations seriously, and determines if action is necessary based on the underlying facts and circumstances, and the law. In 2018, the Department of Justice filed three lawsuits under federal voting laws to protect the right to vote. The Department filed two of those lawsuits, *United States v. Wisconsin* and *United States v. Arizona*, under the Uniformed and Overseas Citizens Absentee Voting Act to protect the voting rights of military and other overseas citizens. The Department filed the third lawsuit, *United States v. Kentucky*, under the National Voter Registration Act to protect voting rights by guaranteeing appropriate maintenance of state voter rolls.

Police Reform- Continued

4. The Division's January 2017 report, *Pattern and Practice Police Reform Work, 1994-Present* notes that "...when the Division finds a pattern or practice of police misconduct, it usually finds that pattern or practice is the product of many decades of dysfunction that has become engrained in police culture...[and] reform agreement must contain realistic and fair deadlines for implementation to be effective." **Do you encourage your personnel to initiate investigations and reform agreements – or must decisions to adopt tools such as consent decrees survive layers of review by DOJ political leadership?**

ANSWER: The Civil Rights Division's process for initiating investigations of patterns or practices of law enforcement misconduct under 34 U.S.C. § 12601 ("Section 12601") is the subject of a 2018 report by the Department of Justice Office of Inspector General, *Audit of the Department of Justice's Efforts to Address Patterns or Practices of Police Misconduct and Provide Technical Assistance on Accountability Reform to Police Departments*, which is available at <https://oig.justice.gov/reports/2018/a1814.pdf>. As noted in that report, career employees of the Division receive information from a variety of sources about alleged patterns or practices of law enforcement misconduct and decide whether to recommend opening a full investigation based on criteria and priorities that were developed by career employees. The Assistant Attorney General for the Civil Rights Division ultimately decides whether to open a full investigation. I have personally encouraged the employees of the Division to continue enforcing Section 12601 and to recommend investigations where the facts and the law warrant them.

Decisions of whether to enter into consent decrees with state or local governmental entities, including law enforcement agencies, are guided by an Attorney General memorandum, *Principles and Procedures for Civil Consent Decrees and Settlement Agreements with State and Local Governmental Entities*, dated November 11, 2018 and available at <https://www.justice.gov/opa/press-release/file/1109681/download>. Pursuant to that memorandum, settlements in cases brought under Section 12601 that take the form of consent decrees must be approved by the Assistant Attorney General for the Civil Rights Division and the Associate Attorney General or Deputy Attorney General, as appropriate, based on factors and requirements set forth in the memorandum. Out-of-court settlement agreements of Section 12601 matters require the approval of the Assistant Attorney General for the Civil Rights Division, with notice to the Associate Attorney General or Deputy Attorney General, as appropriate.

5. **How do you strike the right balance to ensure remedies are strong and effective, particularly given the longstanding nature of the problems reform is targeting, while providing that costs or administrative burdens remain reasonable?**

ANSWER: In negotiating settlements in cases and matters involving a pattern or practice of law enforcement misconduct, the Division and the state or local governmental entity involved work to ensure that all agreed-upon remedies will both address underlying issues and be reasonable in terms of cost and burden. Many of the remedial measures in Section

12601 settlements have a track record of success and cost-effectiveness in other law enforcement agencies. The Division's Section 12601 settlements also typically include provisions to permit modifications of the agreed-upon remedies if less costly or burdensome alternatives can achieve the same results, or if the results that were anticipated from a negotiated remedy have not come to fruition.

The Division's settlement regarding the Seattle Police Department (Washington), for example, permits the Division and the City of Seattle to stipulate to changes to the agreement if "there is a preferable alternative that will achieve the same purpose." Settlement Agreement ¶¶ 174, *United States v. City of Seattle*, Case No. 2:12-cv-1282 (W.D. Wa., filed July 27, 2012), available at https://www.justice.gov/sites/default/files/crt/legacy/2012/07/31/spd_consentedecree_7-27-12.pdf. In addition, the Division and the City of Seattle periodically assess whether "modifications to the Settlement Agreement . . . may be necessary for continued achievement in light of changed circumstances or unanticipated impact (or lack of impact) of the requirement." *Id.* ¶ 175.

LGBTQ rights

6. Mr. Dreiband, when you took over the Civil Rights Division you assumed the obligation to defend civil rights for all, including LGBT Americans. Prior to your arrival, DOJ had filed amicus briefs in several cases under consideration by the Supreme Court, arguing that Title 7 of the Civil Rights Act may not apply to all Americans in all cases. **Will the Department and your Division investigate and oppose all discrimination against LGBT Americans in employment, housing, credit and other areas? If not, what exceptions are being made?**

ANSWER: The Division is committed to enforcing all of the federal civil rights laws duly enacted by Congress, including those that protect LGBT Americans. As the Assistant Attorney General for Civil Rights, I am committed to punishing those who break our nation's laws to discriminate against all Americans, including members of the LGBT community.

7. DOJ sued the University of North Carolina (UNC) regarding enforcement of a state-passed law to limit access of transgendered persons to public bathrooms. You represented UNC in that case, arguing on procedural grounds that the University was not a proper defendant in the lawsuit. **What is your policy on defending Title 9 protections for transgender and other LGBTQ individuals?**

ANSWER: The Division's policy is to enforce Title IX consistent with the language of the statute. Title IX provides, with certain exceptions, that "[n]o person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Therefore, Title IX prohibits funding recipients from discriminating against any person, including transgender and LGBT individuals, based on sex. The Division has taken special care to make its Title IX enforcement policy clear and has stated publicly that no student is "without protections from discrimination, bullying, or harassment," and

that “[a]ll schools must ensure that all students, including LGBT students, are able to learn and thrive in a safe environment.” See CRT/OCR Dear Colleague Letter, February 22, 2017.

Community Outreach/Community Relations Service (CRS) Coordination

8. You testified before the Senate that you would ensure the Division engages with vulnerable communities to build trust in DOJ’s commitment to protecting their civil and constitutional rights. **What efforts is the Division making in this area, and what resources are applied to them?**

ANSWER: Each year, the Civil Rights Division (CRT) engages with a wide range of groups and individuals to further its mission of protecting civil and constitutional rights. CRT’s engagement and outreach takes many forms. Division staff routinely meet with community members and leaders, advocacy organizations, families of victims, and federal, state, and local agencies and law enforcement partners to discuss issues of mutual concern or interest. Division staff also make formal presentations at conferences and seminars and conduct webinars and other types of training to educate advocates, law enforcement, and the public about specific civil rights enforcement areas. Furthermore, the Division’s Disability Rights and Immigrant and Employee Rights Sections manage technical assistance lines that provide information and help to individuals with questions about compliance with the Americans with Disabilities Act and the Immigration and Nationality Act.

Career staff in the Division’s enforcement sections identify and participate in outreach and engagement opportunities to help promote the Division’s enforcement work. Furthermore, the Assistant Attorney General and his staff participate in a range of speaking engagements and presentations to promote the Division’s enforcement work and highlight Administration priorities. The Division does not specifically track the resources spent on outreach and engagement.

Hate crimes

9. You testified in 2017 that “pursuing hate crimes cases will be one of my top priorities.” The FBI reports a surge in hate crime – up 17 percent alone from 2016 to 2017. **How have you focused Division priorities to address this surge?**

ANSWER: Since July 2017, the Department has taken several important actions to advance the fight against hate crimes. These actions have included the robust investigation and prosecution of hate crimes all across the country and the formation of a Department-wide Hate Crimes Enforcement and Prevention Initiative (the “Initiative”) led by the Civil Rights Division to coordinate all of the Department’s anti-hate crime efforts. The Initiative reflects the combined and sustained efforts of several DOJ components, including the Office of Community Oriented Policing Services (COPS Office), the Community Relations Service (CRS), the Federal Bureau of Investigation (FBI), the Office of Justice Programs (OJP), and U.S. Attorney’s Offices (USAOs).

Between January 2017 and September 6, 2018, the Department has pursued hate crimes charges against 51 defendants and obtained convictions of 35 defendants. These prosecutions include:

- In November 2017, the Department cross-designated a Civil Rights Division prosecutor to assist in the state trial of two Iowa men accused of murdering Kedarie Johnson, a gender-fluid teenager. The first defendant was found guilty and is facing a term of life imprisonment. In October 2018, a second defendant was convicted of first-degree murder and awaits sentencing.
- In July 2018, a federal jury convicted a Texas man on all counts related to the 2017 burning of a local mosque, including hate crimes; a Texas man pled guilty to a federal charge of interfering with an African-American family's housing rights; and a Missouri man was sentenced to two years for obstructing persons in the free exercise of religious beliefs at the Islamic Society of Augusta.
- In August 2018, two Maine men were indicted by a federal grand jury for conspiracy to commit a hate crime by assaulting an African-American man. Also, in August, a South Florida man was sentenced to four years in prison and ordered to pay restitution for obstructing the free exercise of religious beliefs by threatening, in a phone message, to detonate a bomb at a mosque in Pembroke Pines, Florida.
- Also, in January 2019, the Department filed additional hate crimes charges against the Pennsylvania man accused of the horrific shooting at the Tree of Life Synagogue in Pittsburgh on October 27, 2018, which killed 11 worshippers and injured 7 other individuals, including five law enforcement officers. The defendant faces 63 counts, including 13 violations of the Matthew Shepard and James Byrd Hate Crimes Prevention Act.

The Department's Hate Crimes Enforcement and Prevention Initiative convened the first-ever seminar on Investigating and Prosecuting Hate Crimes and Domestic Terrorism matters for federal prosecutors and agents on August 28 and 29, 2018. The Initiative also convened a roundtable of law enforcement and other stakeholders on October 29 and 30, 2018. Participants explored promising practices to improve identification and reporting of hate crimes, generated ideas and potential solutions to improve data collection, and discussed actionable steps that law enforcement agencies can take to support identification and reporting of hate crimes.

The Initiative is also coordinating partnerships between the U.S. Attorney's Offices, the Community Relations Service, the DOJ Civil Rights Division, the FBI Civil Rights Unit, and the Department of Homeland Security to provide multi-faceted training for religious institutions on protecting places of worship, including developing emergency prevention and response plans, strengthening physical security of buildings, educating congregants about hate crimes and security, and other preventive and mitigating measures. Protecting place of worship training events have been held throughout the country, and many additional events are being planned.

10. Last October your predecessor noted two barriers to combatting hate crimes are under-identification and underreporting. Half of all victims do not report, often from reluctance to involve police. **How are you working with State and local authorities to close this gap?**

ANSWER: The Department has conducted hundreds of hate crimes trainings and outreach events in communities affected by hate crimes to improve awareness, trust and communication between state and local law enforcement agencies and their communities. For example:

- CRS facilitated 16 Hate Crimes Forums in 2018 (in Pennsylvania, Montana, Texas, Oregon, New York, Michigan, Indiana, Oregon, South Dakota, Utah, Washington, and New Jersey), bringing together federal and local law enforcement, community speakers, federal agencies, and advocacy organizations for a series of three panel discussions to engage in information sharing on methods to combat and respond to bias incidents and hate crimes.
- CRS piloted and facilitated nine Protecting Places of Worship forums in 2018 (Iowa, Illinois, Missouri, Pennsylvania, Texas, Louisiana, Kansas, Montana and Washington DC) bringing together law enforcement, security officials, interfaith leaders, civil rights groups, and community members to educate faith communities on religion-based hate crimes, ways to increase the physical security of religious buildings, and how to respond to active shooter situations. In light of recent attacks on houses of worship across the faith spectrum, this forum provides resources for congregations concerned about the safety and well-being of their members.
- CRS also updated two trainings for local law enforcement and other audiences: “Engaging and Building Partnerships with Muslim Americans” and “Engaging and Building Partnerships with Sikh Americans.” Each of these three-hour trainings includes interactive activities and templates for customized community outreach plans. The trainings are designed to increase awareness of civil rights-related issues Muslim Americans and Sikh Americans encounter, as well as participants’ understanding of Muslim Americans’ and Sikh Americans’ beliefs and religious practices.

In October 2018, the Department launched a comprehensive hate crimes website designed to provide a centralized portal for the Department’s hate crimes resources for law enforcement, media, researchers, victims, advocacy groups, and other related organizations and individuals. Both community based organizations and state and local law enforcement have provided feedback, and we are working to further improve the site. The website can be found at <https://www.justice.gov/hatecrimes>. The site has attracted significant traffic, with over 48,000 visits in a 3 month period (Dec. 2018-Feb-2019).

In April 2018, COPS also solicited applications for the Community Policing Development Program, a competitive grant program that develops law enforcement’s capacity to implement community policing strategies. The 2018 CPD requested applications for field-

directed law enforcement micro-grants in six areas—including hate crimes. (Note: the Field-Initiated Law Enforcement Microgrant topic area in the 2018 Community Policing Development solicitation has been placed on hold until further notice due to litigation.)

In addition to the law enforcement and community trainings identified above, the Department also provides internal Hate Crime trainings to its attorneys and agents. The Civil Rights Division provides training to AUSA's and agents in a variety of formats including (1) live trainings conducted at least every other year at the National Advocacy Center; (2) video trainings for AUSA's and trial attorneys available on LearnDOJ; (3) a chapter on hate crimes that has been newly prepared, for the Violent Crimes Prosecution Manual; (4) an article drafted for USA Book that was published in January, 2018; and (5) participation and consultation in trainings that FBI Civil Rights Unit (CRU) provides to its agents. In addition, CRT has internal trainings for its new trial attorneys. These trainings cover various statutory elements as well as investigative and trial strategies. The FBI's CRU program actively trains its agents through both live trainings and computer link-and-learn trainings.

11. How are you working with the FBI and other agencies to ensure better identification and reporting of hate crimes, to target resources to prevent and solve hate crimes?

ANSWER: Combatting hate crimes is among the highest priorities of the FBI's Civil Rights Unit. In addition to its investigative work around the country, the FBI has worked closely with state and local law enforcement agencies around the country, including:

- In August 2018, the Initiative convened the Department's first-ever seminar on Investigating and Prosecuting Hate Crimes and Domestic Terrorism matters for federal prosecutors and agents.
- The Initiative also convened a roundtable of law enforcement and other stakeholders on October 29 and 30, 2018. Participants explored promising practices to improve identification and reporting of hate crimes, generated ideas and potential solutions to improve data collection, and discussed actionable steps that law enforcement agencies can take to support identification and reporting of hate crimes.
- The FBI conducted more than 200 Hate Crimes/general Civil Rights trainings in Fiscal Year 2018. These included:
 - an FBI Hate Crimes Symposium in Oakland, CA with Northern California law enforcement and community leaders to discuss hate crime response, investigation and prosecution,
 - an April 2018 presentation at the Fair Housing Act Summit in Austin, TX focused on helping federal and state investigators with case identification, investigation, and prosecutions of Fair Housing Act violations; and
 - a November 2018 forum with the U.S. Attorneys Office in Minnesota to discuss federal hate crimes laws, identifying and reporting hate crimes, and best practices for creating safe and secure houses of worship.

12. The President signed the *Civil Rights Cold Case Records Collection Act of 2018* into law on January 8, which provides for review and release of records of criminal investigations into alleged Federal civil rights violations between 1940 and 1980. **Will this mean additional workload for the Civil Rights Division? If so, how will you adjust?**

ANSWER: The Cold Case Records Collection Act of 2018 (CCRCA) will require resources from not only the Civil Rights Division, but from the FBI, individual United States Attorney's Offices, and any other component that has files that fall within the CCRCA's definition. The CCRCA contains a broad definition of what matters it covers; it is broader than the Emmett Till Unsolved Civil Rights Crime Act (Till Act). The Till Act and its reauthorization are restricted to "unsolved civil rights murders." See 28 U.S.C.A. § 509 (Functions of the Attorney General; notes—Unsolved Civil Rights Crimes, §§ 2(a) and 3(b)(1)). The CCRCA, by contrast, covers *any* unsolved case arising out of events that occurred between January 1, 1940, and December 31, 1979, and which is "related to" statutes enforced by the Civil Rights Division. See 44 U.S.C.A. § 2107 (Acceptance of records for historical preservation; notes—Civil Rights Cold Case Records Collection Act of 2018).

The Civil Rights Division anticipates that all Till Act cases it has re-examined since the Till Act's enactment will have associated files that fall under the CCRCA. This group now consists of about 150 files, although some matters are still under investigation and therefore remain open and are not appropriate to send to the National Archives and Records Administration (NARA). The Department's next Till Report to Congress will identify each of these matters. The Division is in the process of determining how many other cases and matters it has prosecuted, investigated, or evaluated that may fall within the CCRCA's definition and which are still within the Division's possession. Many cases falling within the CCRCA's timeframe were, over the past 75 years, transferred to NARA in the normal course of business.

The Department will require resources to review the files currently in its possession before they are transferred to the Archivist at NARA. Under the CCRCA, not every document in every file should be immediately made available to the public. Instead, certain material is subject to temporary or permanent withholding and therefore personnel from every responding agency will be required to review each document for its potential withholding and/or redaction. For example, certain medical information must be redacted. See CCRCA, § 9(a)(2). Information that would clearly and demonstrably damage national security, military defense, or reveal classified information must be temporarily or permanently removed. See CCRCA, § 4(1)(a) and § 3(f). Records (or parts of records) may be withheld if information in such records would clearly and demonstrably:

- Reveal the name or identity of a living individual who provided confidential information if this would pose a substantial risk of harm to that individual. See CCRCA, § 4(2);
- Constitute an unwarranted invasion of personal privacy. See CCRCA, § 4(3).
- Compromise the existence of an understanding of confidentiality currently requiring protection between a Government agent and a cooperating individual or group; must be removed under certain circumstances (when publication would be

“so harmful that the understanding of confidentiality outweighs the public interest). *See* CCRCa, § 4(4).

- Endanger the life or physical safety of any individual. *See* CCRCa, § 4(5).
- Interfere with ongoing law enforcement proceedings. *See* CCRCa, § 4(6).

In addition, under federal law, no grand jury information may be revealed without a court order. While the Review Board (the entity tasked with implementing the CCRCa) may request that we obtain that order under Section 8(A) of the CCRCa, there is no provision in Federal Rule of Criminal Procedure (6) that allows for release of grand jury records because of historical interest, and the federal courts of appeals have split on this issue. Thus, it is unclear whether the government will be able to obtain such an order. Moreover, while any motion to unseal transcripts is pending, the government will need to prevent anyone, including the Review Board, from reading such records or risk being in contempt of court.

The Civil Rights Division will have to review each file in its possession to determine what information, if any, should be temporarily or permanently withheld when the file is made public. Although its decision is subject to review by the Review Board, it will be the Civil Rights Division’s obligation, in the first instance, to identify information subject to temporary or permanent withholding. Some of these redactions, such as the redaction of social security numbers and bank account numbers pursuant to § 4(3), or the redaction of medical information pursuant to § 9(a)(2), should be a fairly routine redaction. However, sophisticated judgment and a thorough knowledge of the file will be needed to ensure that the other material is properly identified and that the Civil Rights Division neither fails to redact critical information nor over-redacts in violation of the CCRCa’s clear goal of disclosing more information about these important records.

For example, to determine whether information might reveal the name of a living individual in a way that might create a substantial risk of harm to him or her, the Department will have to determine – from among all the witnesses named in a cold case file – which ones provided confidential information to the government. While this would be an easy task for an agent or attorney actively working on a case, personnel in the Civil Rights Division will have to thoroughly examine cold files to ensure that they do not miss an indication that the individual was a confidential informant or source, or that that person was not otherwise promised confidentiality in return for providing information.

Once it is determined that a witness whose name appears in a cold case record provided confidential information, it will be necessary to determine whether that individual is still alive. In early investigations, social security numbers were not always gathered (indeed, with regard to the earliest cases that fall under the CCRCa, not all individuals even *had* social security numbers at the time of the investigation; such numbers first began to issue in 1936). In the absence of such unique identifiers, it may be difficult to quickly determine whether the person who provided the confidential information is still alive – a necessary prerequisite to making the assessment of whether to withhold or redact the information.

In order to ensure the safety and privacy of all witnesses who came forward with information, as well as to fulfill obligations to protect classified information and information

Congress has identified as similarly important, the Civil Rights Division will have to spend time reviewing each page of the files in its possession. These files are, by definition, old files. Some documents may be on Xerox paper, typed in ink that has lightened over the years; other documents may be entirely handwritten. These files can be difficult to read. The files can be difficult to scan if the paper is fraying. Moreover, it takes time to scan such files when paper is delicate or disintegrating and, once scanned, such files often remain difficult to search by computer.

The Civil Rights Division is collecting cases that fall under the CCRCA and is waiting for the Archivist at NARA to establish criteria for Government offices to follow in complying with the CCRCA.

13. The Department has since 2009 conducted hate crimes identification training programs for law enforcement and community groups, as well as international workshops. **What training is the Division providing under this approach in fiscal year 2019, and what resources does it devote to such training? What training is provided to the Division's own personnel and other DOJ elements?**

ANSWER: The Department has made considerable strides to improve hate crimes training for federal, state, local, and tribal law enforcement agencies. For example:

- At the October 2018 law enforcement roundtable, the Deputy Attorney General announced that a \$10 million dollar technical assistance program, managed by the COPS Office, launched last March by then Attorney General Sessions will now include the prosecution and prevention of hate crimes. See <https://www.justice.gov/opa/pr/deputy-attorney-general-rosenstein-announces-funds-and-technical-assistance-resources-help>. For the first time, law enforcement will be able to access critical and innovative education and training resources on hate crimes investigation and prevention. The extension of technical assistance relating to hate crimes by the Collaborative Reform Technical Assistance Center, a partnership with the International Association of Chiefs of Police (IACP), and nine leading law enforcement leadership and labor organizations, will allow law enforcement to build and improve their hate crimes investigation and reporting practices.
- In March 2019, the FBI's Criminal Justice Services Division and Civil Rights Unit (CRU) co-hosted the first in a series of six hate crime trainings. To date, four training sessions have occurred. The other trainings are scheduled from June to August 2019. The Civil Rights Special agents provided an interactive presentation describing the federal hate crime statutes. They also discussed landmark cases and provided incident scenarios and case studies. The Uniform Crime Reporting Program provided an overview of the hate crime statistics collection, hate crime reporting scenarios, and discussed the importance and benefits of reporting hate crime incident data.

- In July 2018, CRT and the FBI presented a hate crimes training at the Commission on Accreditation for Law Enforcement Agencies' annual conference.
- In March 2019, CRT conducted a joint hate crimes webinar training for state and local prosecutors in collaboration with the National Association of Attorney Generals (NAAG) and the National District Attorneys Association (NDAA) to raise awareness and share best practices for hate crime prosecutions with interested assistant state and district attorneys.

The Department-wide Hate Crimes Enforcement and Prevention Initiative, which is led by the Civil Rights Division to coordinate all of the Department's anti-hate crime efforts, is also coordinating partnerships between the U.S. Attorney's Offices, the Community Relations Service, the Civil Rights Division, the FBI Civil Rights Unit (CRU), and the Department of Homeland Security to provide multi-faceted training for religious institutions on protecting places of worship. These trainings include developing emergency prevention and response plans, strengthening physical security of buildings, educating congregants about hate crimes and security, and other preventive and mitigating measures. Protecting place of worship training events have been held throughout the country, and many additional events are being planned.

In addition to the law enforcement and community trainings identified above, the Department also provides internal trainings to its attorneys and agents on how to identify, investigate, and prosecute hate crimes. The Civil Rights Division has taken the lead on developing a robust training series that provides such hate crime training in a variety of formats, including: (1) large, live trainings conducted at least every other year at the National Advocacy Center (NAC); (2) supplemental symposiums and similar trainings given at the NAC or similar venues; (3) video trainings for AUSAs and trial attorneys available on LearnDOJ, the Department's electronic learning management system; (4) written resources, including a chapter on hate crimes that will be prepared in the new version of the Violent Crimes Prosecution Manual and an article on federal hate crimes drafted for USA Book published in January 2018; and (5) participation and consultation in trainings that FBI's CRU provides to its agents. In addition, individual components have adopted trainings. CRT has internal trainings for its own newly hired attorneys; such trainings cover various statutory elements and investigative strategies in each kind of case CRT prosecutes, including hate crimes. The FBI's CRU program actively trains its agents through both live trainings and computer link-and-learn trainings.

The Honorable Matthew Cartwright
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record

Civil Rights Division Oversight Hearing

1. Usually, when an entity has been found guilty of discrimination under civil rights laws, DOJ will enter into a binding legal agreement with that organization forcing it to improve its practices. Based on public records, the Civil Rights Division under President Trump has filed an average of 5.6 such agreements per month, which is 20% less than under Bush and Obama.¹ **Is that estimate correct?**

ANSWER: I cannot confirm whether the figures cited above are accurate, as the Department does not maintain this data, nor would be able to release it if it were collected.

2. The DOJ has reported an uptick in violent hate crimes, something the DOJ Strategic Plan expressed a need to focus on. However, the Department of Justice has also reported that prosecution of hate crimes has fallen² by 20% compared to the Obama administration. **Is this characterization of prosecutions accurate?**

ANSWER: Investigating and prosecuting violent hate crimes has long been a Departmental priority and remains one under the current administration. Because hate crime reporting is often unreliable, it is unclear whether increases (or decreases) in any year's hate crime statistics, as documented in the FBI's Uniform Crime Report, reflect a difference in the number of hate crimes committed or only in the number of hate crimes reported for that year. Moreover, the number of federally prosecutable hate crimes fluctuates from year to year. Thus, when compared over multiple years, there has been no dramatic decrease in the federal prosecution of bias-motivated crimes.

The FBI's most recent hate crime statistics suggest that the number of hate crimes has increased in the past few years. For example, for the year 2016, the FBI reported that, among those law enforcement agencies reporting hate crime data to the FBI, there were 6121 hate crime incidents involving 7321 offenses. For the year 2017, the FBI reported that, among those law enforcement agencies reporting hate crime data to the FBI, there were 7175 hate crime incidents involving 8437 offenses.

These more recent statistics do not illustrate a continuous upward trend. For the year 2007, for example, the FBI reported that, among those law enforcement agencies reporting hate crime data to the FBI, there were 7624 hate crime incidents involving 9006

¹ https://news.vice.com/en_us/article/biq37m/exclusive-trumps-justice-department-is-investigating-60-fewer-civil-rights-cases-than-obamas

² <https://www.justice.gov/opa/pr/justice-department-releases-update-hate-crimes-prosecutions-and-announces-launch-new-hate>

offenses. The number of reported hate crimes has, however, shown a generally steady increase since 2012, when the number of reported hate crime incidents fell below 6000.

Given that hate crimes have historically been both under-identified and under-reported, it is not clear that this increase represents an increase in the occurrence of hate crimes or only in their reporting. According to the National Crime Victimization Survey, about half of all hate crime victimizations are reported to police. In addition, not every law enforcement agency reports hate crime data to the FBI's Uniform Crime Reporting (UCR) Program – the Department's primary means of collecting hate crime data.

The Department has taken steps to address the inaccuracy of hate crime reporting, both by encouraging victims to report all hate crimes and by encouraging state and local law enforcement agencies to provide accurate numbers to the FBI. Soon after the last presidential election, the Department established an internal working group to explore ways to improve the compilation and aggregation of hate crimes statistics. That working group has now become a Department-wide Hate Crimes Enforcement and Prevention Initiative (Initiative) led by the Civil Rights Division to coordinate the Department's efforts to eradicate hate crimes. In October of 2018, the Initiative convened a law enforcement roundtable to discuss with state and local law enforcement agencies the hurdles to accurate hate crime reporting. At that roundtable, the Department announced a grant to the University of New Hampshire to conduct a national survey of hate crime incidents and victimization. Finally, it is anticipated that the accuracy of hate crime statistics will improve over the next few years as the FBI continues to work with law enforcement agencies to transition from summary-based crime reporting to incident-based reporting. The FBI's Uniform Crime Reporting Program is assisting local, state, tribal, and federal law enforcement agencies nationwide to transition to the National Incident-Based Reporting System (NIBRS). Thousands of agencies already participate in NIBRS, and the FBI has received thousands of commitments from additional law enforcement agencies across the nation to become NIBRS-compliant by January 1, 2021. NIBRS includes a designated field for law enforcement agencies to report hate crimes. Thus, reporting information to the FBI through NIBRS will improve the quality, reliability, and accuracy of hate crime data.

Given the Department's emphasis on increasing the accuracy of hate crime data, it is possible that the recently recorded increase in reported hate crimes is due to an increase in reporting, rather than in increase in actual hate crime incidents.

The Department has certainly not slowed in its hate crime prosecutions. The Department has historically vigorously prosecuted those hate crimes for which there is federal jurisdiction if federal interests support such a prosecution. It has continued to do so in the current administration. Over the past ten years, our prosecution efforts have reflected our commitment to the strongest possible federal enforcement of bias-motivated criminal statutes. As such, the number of bias-motivated cases filed since 2017 is generally consistent with the average number of bias-motivated cases filed each year since 2009.

Slight differences in the number of cases filed each year exist. For example, the numbers of cases filed in 2017 and 2018 (17 and 22, respectively) are lower than the number of cases filed in 2009 (25), but they are higher than the number of cases filed in 2015 (12) – the individual year with the lowest number of cases filed over the last decade. These slight fluctuations in the numbers of cases filed each year are more likely the result of factors such as whether federal jurisdiction exists for a particular case, or whether we determined, in consultation with our state and local partners, that prosecution in state court would be best for the case. It does not indicate any change in the Department’s commitment to vigorously prosecuting violations of federal hate crime laws.

3. The FBI 2017 Hate Crime Statistics report showed over 90 cities with a population of 100,000 and more that did not report or reported zero incidents of hate crimes. **What specific steps are being taken by the Department of Justice to address underreporting by the local reporting agencies for the FBI report?**

ANSWER: The underreporting of hate crimes to the FBI has two primary causes: 1) individuals underreport hate crimes to law enforcement; and 2) law enforcement fail to properly identify, investigate and report hate crimes to the FBI. The U.S. Department of Justice is working to address both issues. To improve individual reporting of hate crimes to law enforcement, the Department of Justice:

- 1) has conducted hundreds of hate crimes trainings and outreach events in communities affected by hate crimes, including:
 - CRS facilitated ten Hate Crimes Forums in 2018 (Pennsylvania, Montana, Texas, Oregon, New York, and New Jersey), bringing together federal and local law enforcement, community speakers, federal agencies, and advocacy organizations for a series of three panel discussions to engage in information sharing on methods to combat and respond to bias incidents and hate crimes.
 - CRS piloted and facilitated five Protecting Places of Worship forums in 2018 (Iowa, Missouri, Pennsylvania, Texas, and Washington DC) bringing together law enforcement, security officials, interfaith leaders, civil rights groups, and community members to educate faith communities on religion-based hate crimes, ways to increase the physical security of religious buildings, and how to respond to active shooter situations. In light of recent attacks on houses of worship across the faith spectrum, this forum provides resources for congregations concerned about the safety and well-being of their members.
 - CRS also updated two trainings for local law enforcement and other audiences: “Engaging and Building Partnerships with Muslim Americans” and “Engaging and Building Partnerships with Sikh Americans.” Each of these three-hour trainings includes interactive activities and templates for customized community outreach plans. The trainings are designed to increase awareness of civil rights-related issues Muslim Americans and Sikh Americans encounter, as well as participants’ understanding of Muslim Americans’ and Sikh Americans’ beliefs and religious practices.

- In response to the massacre at the Tree of Life Synagogue in Pittsburgh, as well as other hate incidents across the country, CRS invited faith-based organizations and other community groups to participate in an informational one-hour public webinar, “Responding to Hate Crimes and Community Conflicts,” on November 28, 2018.
 - In October 2018, CRS led both a community and a law enforcement focus group to revise its Engaging and Developing Relationships with Transgender Americans training program.
- 2) The Department is developing a model hate crimes training for community outreach, which DOJ components and USAOs, in particular, can customize to address specific issues faced by communities in their districts;
 - 3) The Department launched a new hate crimes website in October 2018 to increase public awareness about hate crimes. This website is a one-stop portal for the general public, law enforcement officials, educators, public officials, media, and other stakeholders to access Department resources about hate crimes. See <https://www.justice.gov/hatecrimes/>. The website aggregates Department resources about federal hate crime laws, prevention programs, police policies and procedures, community awareness building practices, victim service resources, and law enforcement training initiatives, as well as information about reporting hate crimes and a summary of recent hate crimes prosecutions. Individuals and law enforcement agencies also can request a DOJ-led hate crimes training in their community through the website.

The Department has undertaken significant efforts to improve law enforcement’s identification, investigation and reporting of hate crimes, including:

- 1) On October 29-30, 2018, the Department hosted the first-ever law enforcement roundtable on improving the identification and reporting of hate crimes. This event brought together law enforcement and other leaders from around the country to explore successful practices and challenges in identifying, reporting, and tracking hate crimes. Attendees and presenters included law enforcement executives of major cities and leaders of major law enforcement organizations. Presenters and facilitators came from components across the Department, including the FBI, the OJP, the Bureau of Justice Statistics, and the CRS, as well as the COPS Office and CRT.
- 2) The FBI Field Offices conducted more than 200 Hate Crimes/general Civil Rights trainings of law enforcement agencies in Fiscal Year 2018.
- 3) Also, approximately 30% of USAOs participate in hate crimes task forces/working groups with state/local law enforcement and community leaders.
- 4) In early 2018, the FBI UCR Program provided the Executive Office of United States Attorneys and FBI Civil Rights Unit with a list of law enforcement agencies, broken down by district or field office, which either did not participate or reported zero hate

crime incidents to the FBI's Hate Crime Statistics Collection from, 2010-2016. In an effort to improve reporting, United States Attorneys and FBI Supervisory Special Agents were encouraged to contact the law enforcement agencies in their districts or field offices to emphasize the importance of hate crime reporting and offer assistance if necessary.

4. What measures is DOJ taking to improve training for law enforcement officials to identify, report, and respond to hate-motivated violence, and what is the proven effectiveness of those measures?

ANSWER: The Department has made considerable strides to improve hate crimes training for federal, state, local, and tribal law enforcement agencies. For example:

- At the October 2018 law enforcement roundtable, the Deputy Attorney General announced that a \$10 million dollar technical assistance program, managed by the COPS Office, launched last March by then Attorney General Sessions will now include the prosecution and prevention of hate crimes. See <https://www.justice.gov/opa/pr/deputy-attorney-general-rosenstein-announces-funds-and-technical-assistance-resources-help>. For the first time, law enforcement will be able to access critical and innovative education and training resources on hate crimes investigation and prevention. The extension of technical assistance relating to hate crimes by the Collaborative Reform Technical Assistance Center, a partnership with the International Association of Chiefs of Police (IACP), and nine leading law enforcement leadership and labor organizations, will allow law enforcement to build and improve their hate crimes investigation and reporting practices.
- In March 2019, the FBI's Criminal Justice Services Division and Civil Rights Unit co-hosted the first in a series of six hate crime trainings. To date, four training sessions have occurred. The other trainings are scheduled from June to August 2019. The Civil Rights Special agents provided an interactive presentation describing the federal hate crime statutes. They also discussed landmark cases and provided incident scenarios and case studies. The Uniform Crime Reporting Program provided an overview of the hate crime statistics collection, hate crime reporting scenarios, and discussed the importance and benefits of reporting hate crime incident data.
- In July 2018, CRT and the FBI presented a hate crimes training at the Commission on Accreditation for Law Enforcement Agencies' annual conference.
- In March 2019, CRT conducted a joint hate crimes webinar training for state and local prosecutors in collaboration with the National Association of Attorney Generals (NAAG) and the National District Attorneys Association (NDAA) to raise awareness and share best practices for hate crime prosecutions with interested assistant state and district attorneys.

5. *The New York Times* on November 3, 2018 examined the extent to which Federal and State government authorities lack sufficient knowledge of white supremacist groups and of which individuals are likely to act upon their ideology with violence.

- a. **What resources are DOJ currently using to address the threats? Please provide a 10-year assessment of the resources (including Full-Time Equivalent Employment) previously directed to monitor these threats.**

ANSWER: The Civil Rights Division relies upon the FBI and other federal law enforcement agencies to be the primary agency tracking ongoing threats and to look for indicators of escalation. The Division, however, plays a critical function in augmenting the role of these agencies. Because cases are referred to the Division through a variety of sources, such as NGOs and individuals who feel victimized, the Division is in a position to see when seemingly minor attacks and threats begin to increase. In addition, investigators with the Division comb public sources of information, like news articles, daily to determine whether there are incidents of violence that have not been referred through federal or state law enforcement or by NGOs but that might, nonetheless, amount to a violation of federal hate crime laws.

The FBI has a dedicated domestic terrorism program within the Counterterrorism Division to provide operational oversight for domestic terrorism investigations in an effort to prevent violent acts from occurring. According to the Attorney General Guidelines and the Domestic Investigation Operations Guide, all domestic terrorism investigations require three prongs – regardless of ideologies:

- Advancement of a political or social goal;
- Wholly or in part through activities that involve the use of force or violence;
- In violation of federal law.

A mere nexus or affiliation with a domestic group or individual, or adherence to a specific ideology such as white supremacy, does not predicate an FBI domestic terrorism investigation.

Hate crimes are investigated as federal civil rights violations. A hate crime is defined as a criminal offense against a person or property, and is motivated in whole or in part by the individual's bias against a race, religion, ethnicity/national origin, disability, sexual orientation, gender, or gender identity. Some hate crimes are also acts of domestic terrorism, and the Division has vigorously prosecuted such incidents, for example through prosecuting and convicting Dylann Roof who killed worshippers at a church in South Carolina, and indicting Robert Bowers for murdering worshippers at a synagogue in Pittsburgh.

Hate crime investigations are the number one priority within the FBI's civil rights program. Through training, public outreach, law enforcement support, and investigations, the FBI takes a multi-step approach to detect and deter potential

hate crimes and to investigate those which, unfortunately, do occur. The FBI works closely with state/local/tribal authorities on investigations, even when federal charges are not brought. FBI investigative resources such as experts in handling electronic devices or data, or forensic expertise from the Evidence Response Team and FBI Laboratory, and Agents experienced in identification and proof of bias motivations often provide an invaluable complement to local law enforcement. Many cases are also prosecuted under state statutes such as murder, arson, or state hate crime laws.

The Department does not maintain data in a manner that enables it to provide a historical 10-year assessment of the resources previously directed to combat these threats.

- b. **How many interagency task forces are in place to monitor these threats? How often do they meet? Please provide a historical 10-year assessment of the task forces, including a report on the sharing of data between the Federal and State law enforcement agencies.**

ANSWER: The FBI's domestic terrorism program is supported and carried out by the more than 180 Joint Terrorism Task Forces located in the FBI field offices and resident agencies throughout the United States. As such, they benefit from the combined resources of our many federal, state, and local partners.

In addition, many FBI field offices also participate in local Hate Crime Working Groups, which combine community and law enforcement resources to develop strategies to address local hate crime problems.

The Department does not maintain data in a manner that enables it to provide a historical 10-year assessment of the task forces, or a report on the sharing of data between the Federal and State law enforcement agencies.

- c. **Is the Department studying certain public institutions, such as prisons, as particular sites of susceptibility to the propagation of domestic extremist ideologies? Are there programs underway to constrain such propagation and how are they being evaluated?**

ANSWER: It is important to understand that any ability to "constrain" propaganda will be subject to a First Amendment challenge. The question identifies prisons, where concerns about institutional safety are weighed against First Amendment rights; however, even prisoners have First Amendment rights. Moreover, constraining hateful ideology outside the prison context while respecting the First Amendment would be incredibly difficult, except in those circumstances where propaganda rises to the level of a solicitation to commit a crime of violence or a threat to do so.

6. The Department of Education – with support from DOJ – no longer requires public schools to allow students to use the restroom that corresponds with their gender identity. The Department of Education also stopped investigating claims that students are being discriminated against for being transgender. **How does the Civil Rights Division protect transgender students that face harassment or discrimination? For example, what happens if a school nurse declines to treat a transgender student on religious grounds?**

ANSWER: The Department is committed to protecting transgender individuals and has taken concrete actions to do. The Department of Justice will not tolerate illegal discrimination against transgender individuals. Through the Shepard-Byrd Act and the Violence Against Women Reauthorization Act, Congress has entrusted to the Department the duty to prosecute discrimination on the basis of gender identity. In fact, in May 2017, the Department secured a 49-year prison sentence against a man who assaulted and murdered a transgender woman in a hate crime. This case was the first prosecution under the Shepard-Byrd Hate Crimes Act for a hate crime targeting a victim based on gender identity. Further, in November 2017, the Department cross-designated an experienced federal hate crimes prosecutor to assist Iowa state authorities in prosecuting one of the accused murderers of a gender-fluid teenager named Kedarie Johnson. That prosecution resulted in a conviction and life sentence. That Department prosecutor returned to Iowa in October 2018 to assist with the trial of the other accused murderer, which also resulted in a conviction. The Department has vigorously enforced these laws, and will continue to do so, on behalf of all Americans, including transgender Americans.

In the February 2017, the Departments of Justice and Education withdrew two guidance documents regarding transgender students that they jointly issued on May 13, 2016. As the February 2017 notice makes clear, the “withdrawal of these guidance documents does not leave students without protections from discrimination, bullying, or harassment. All schools must ensure that all students, including LGBT students, are able to learn and thrive in a safe environment. The Department of Education Office of Civil Rights will continue its duty under law to hear all claims of discrimination and will explore every appropriate opportunity to protect all students and to encourage civility in our classrooms. The Department of Education and the Department of Justice are committed to the application of Title IX and other federal laws to ensure such protection.”

7. Since President Trump assumed office, the DOJ has initiated no new cases under Section 2 of the Voting Rights Act. **How is DOJ upholding its responsibility to enforce Section 2 without bringing cases under it?**

ANSWER: The Department of Justice is resolutely committed to zealous and evenhanded enforcement of the Voting Rights Act and to free and fair elections for all Americans. Since 2017, the Department has participated as a party or an amicus in 6 cases brought under Section 2 of the Voting Rights Act. Three of those cases have been finally resolved by appellate courts, and in all three cases the appellate courts adopted the position advocated by the United States. The other three cases remain pending with the courts.

The Department's level of Section 2 activity since President Trump took office is consistent with its level of Section 2 activity during the eight years immediately prior to his taking office. From 2009 through 2013, the Department filed one case under Section 2. It filed that case in early 2009 and filed no Section 2 cases in 2010, 2011, or 2012. The Department filed three Section 2 cases in 2013, no Section 2 case in 2014, 2015, or 2016, and one Section 2 case in early January 2017. In the eight years before President Trump took office, the Department filed a total of 5 Section 2 cases, and it filed no Section 2 cases in each of six separate calendar years. That total includes the Section 2 redistricting cases that the Department filed after every State in the country engaged in redistricting following the 2010 Census. By contrast, there has been no decennial census and no redistricting by any State since President Trump took office, and therefore no comparable opportunity to file any Section 2 case challenging a decennial redistricting plan.

8. In the challenge to Texas's voter ID law, DOJ recently reversed its previous position and made arguments in support of the state that the State's law is not intentionally discriminatory. This was after the federal district court specifically held that this law discriminates against African American and Latino voters. **Is the DOJ's decision to drop its legal challenge to an intentionally discriminatory voting restriction consistent with the Civil Rights Division's mission to uphold the rights of "the most vulnerable members of our society"?**

ANSWER: The Department of Justice is resolutely committed to zealous and evenhanded enforcement of the Voting Rights Act and to free and fair elections for all Americans. The question omits a critical—and dispositive—fact: after the district court found that the Texas voter ID law was intentionally discriminatory, the Texas Legislature amended the law to cure the defects that the district court had found. In fact, the Legislature's amendment essentially mirrored the district court's own interim remedy, which the court put in place for the 2016 election in which nearly 9 million Texans voted. The United States Court of Appeals for the Fifth Circuit held that the Legislature's amendment was valid and cured any defects in the original law, and it therefore upheld Texas's amended voter ID law. No party sought review of that decision in the United States Supreme Court.

9. The President has repeatedly asserted without providing any supporting data that millions of people voted illegally in the 2016 election and set up a now-disbanded "Presidential Advisory Commission on Election Integrity" to study this alleged voter fraud. **Does the DOJ have data supporting the president's claim that millions of illegal votes were cast during the 2016 election?**

ANSWER: The Department of Justice is not aware of any data on this issue.

10. The independent, non-partisan U.S. Commission on Civil Rights recently published an assessment of minority voting rights access in the U.S. The report finds that "Voter access issues, discrimination, and barriers to equal access for voters with disabilities and for voters with limited-English proficiency continue today". It also recommends that DOJ

"pursue more Voting Rights Access (VRA) enforcement in order to address the aggressive efforts by state and local officials to limit the vote of minority citizens and the many new efforts to limit access to the ballot in the post-Shelby County v Holder landscape." **What actions has the Civil Rights Division taken to implement this recommendation?**

ANSWER: The Department of Justice is resolutely committed to zealous and evenhanded enforcement of the Voting Rights Act and to free and fair elections for all Americans. Since 2017, the Department has participated as a party or an amicus in 6 cases brought under Section 2 of the Voting Rights Act. Three of those cases have been finally resolved by appellate courts, and in all three cases the appellate courts adopted the position advocated by the United States. The other three cases remain pending with the courts.

Moreover, in 2017, the Department of Justice filed and settled a lawsuit under the National Voter Registration Act, *United States v. Board of Elections in the City of New York*, to protect the voting rights of more than 117,000 voters who had been improperly removed from a State's voter registration rolls. In 2018, the Department of Justice filed three lawsuits under federal voting laws to protect the right to vote. The Department filed two of those lawsuits, *United States v. Wisconsin* and *United States v. Arizona*, under the Uniformed and Overseas Citizens Absentee Voting Act to protect the voting rights of military and other overseas citizens. The Department filed the third lawsuit, *United States v. Kentucky*, under the National Voter Registration Act to protect voting rights by guaranteeing appropriate maintenance of state voter rolls. Finally, in 2018 the Department reached a settlement agreement with Cococino County, Arizona, to ensure accessible voting for voters with disabilities.

11. Two courts have found that Commerce Secretary Ross unlawfully added a citizenship status question to the 2020 census, rejecting the argument that it was necessary to enforce the Voting Rights Act. **Will the Justice Department continue to support the addition of this question in light of these federal court decisions?**

ANSWER: The United States's appeal of the district court decisions invalidating Secretary Ross's decision to reinstate a citizenship question on the 2020 Census questionnaire is pending before the United States Supreme Court. Therefore, it would be inappropriate for the Department of Justice to comment on this matter.

12. It has been reported that the Department of Homeland Security may provide the Census Bureau with personal data about noncitizens, including their immigration status. **Does the Department of Justice have a role in protecting against such disclosures?**

ANSWER: I am not familiar with any role that the Department of Justice plays in protecting against such disclosures aside from prosecuting unlawful disclosures.

13. The Violent Crime Control and Law Enforcement Act of 1994 allows the U.S. Attorney General to initiate a civil rights investigation and sue law enforcement agencies that engage in a pattern or practice of policing that violates the U.S. Constitution and federal laws. After highly-publicized incidents of police killings of unarmed residents in Chicago, IL, Ferguson, MO, and Baltimore, MD, police chiefs and elected officials invited the Department of Justice to open civil rights investigations of their police departments. **Has the DOJ responded to pending requests for civil rights investigations of police departments, such as the one made by the Mayor of Elkhart, Indiana³ where 28 of its 35 supervisors reportedly have disciplinary records and several have been accused of using excessive force against residents? If so, how many new civil rights investigations, specifically Section 12601 pattern or practice investigations of police departments, have been opened? How many requests have been denied?**

ANSWER: As noted above in response to Question 4, the Civil Rights Division receives information about alleged patterns or practices of law enforcement misconduct from a variety of sources, and career employees of the Division assess information as it comes in pursuant to established criteria and priorities to determine whether to recommend opening an investigation. This process, which is explained more fully in the Department of Justice Office of Inspector General Report cited above (available at <https://oig.justice.gov/reports/2018/a1814.pdf>), continues under this Administration. The Division does not typically inform law enforcement agencies that it is considering whether to open an investigation of an alleged pattern or practice of law enforcement misconduct or make such information known to complainants or other members of the public. We therefore do not typically issue denials for requests to investigate law enforcement agencies when we have decided not to pursue a full investigation. The Division is aware of the allegations regarding the Elkhart, Indiana Police Department.

In April 2018, the Division opened an investigation of the Springfield, Massachusetts Police Department regarding an alleged pattern or practice of police misconduct by officers in its narcotics unit.

14. In November 2018, former Attorney General Sessions released a memo to the Heads of Civil Litigating Components and U.S. Attorneys limiting the use of consent decrees, settlement agreements and independent monitors in litigation against state and local entities who are alleged to have violated federal civil rights laws. The memo severely limits the ability of the Civil Rights Division to exercise its legal judgment, and the legal advice of career attorneys, as to the appropriate and necessary remedies to address systemic constitutional violations by police departments. **What will the Civil Rights Division do to ensure that police departments that are violating people's civil rights are held accountable?**

ANSWER: The Division will be guided by Section 12601, which authorizes the Attorney General to "obtain appropriate equitable . . . relief to eliminate the pattern or practice" that violates Section 12601. Decisions of whether to enter into consent decrees

³ <https://www.propublica.org/article/elkhart-who-will-now-police-the-police>

with state or local governmental entities, including law enforcement agencies, are guided by an Attorney General memorandum, *Principles and Procedures for Civil Consent Decrees and Settlement Agreements with State and Local Governmental Entities*, dated November 11, 2018 and available at <https://www.justice.gov/opa/press-release/file/1109681/download>. Pursuant to that memorandum, settlements in cases brought under Section 12601 that take the form of consent decrees must be approved by the Assistant Attorney General for the Civil Rights Division and the Associate Attorney General, or Deputy Attorney General, as appropriate, based on factors and requirements set forth in the memorandum. Out-of-court settlement agreements of Section 12601 matters require the approval of the Assistant Attorney General for the Civil Rights Division, with notice to the Associate Attorney General or Deputy Attorney General, as appropriate.

There are more than 18,000 police and sheriff's departments in the United States. Since Section 12601's passage in 1994, the Civil Rights Division has opened 69 formal investigations and has entered into 43 reform agreements regarding patterns or practices of law enforcement misconduct. The Division will continue to carefully assess the information it receives about law enforcement misconduct to determine whether to open investigations and, once it determines that a pattern or practice of law enforcement misconduct exists, what kind of remedial measures are necessary to ensure that the pattern or practice is eliminated. In considering the appropriate remedial measures, we will seek to enter a consent decree if we believe that one is appropriate and if the factors established by the Attorney General memorandum cited above are present.

15. What is the status of pending consent decrees with law enforcement agencies? Does the DOJ plan to seek termination of pending consent decrees? If so, in which cities?

ANSWER: The Civil Rights Division is currently enforcing 14 consent decrees in cases brought under Section 12601 involving a pattern or practice of law enforcement misconduct. (The Division is also enforcing two post-judgment orders and six out-of-court settlement agreements in Section 12601 cases or matters.) These decrees typically include provisions that condition termination of the decree on the law enforcement agency reaching full compliance with the requirements of the decree and sustaining that compliance for enough time to demonstrate that reforms are durable. Several law enforcement agencies have reached full compliance with a Section 12601 consent decree and are currently in a period of sustaining that compliance; if they are successful, the Division anticipates seeking termination of the decrees. These agencies include the Meridian Police Department (Mississippi), the Warren Police Department (Ohio); the Seattle Police Department (Washington); and the Virgin Islands Police Department.

16. Why did the Civil Rights Division agree to terminate a memorandum of agreement with the Shelby County Juvenile Court in October 2018 when the monitor in the case assessed the court to be non-compliant with its obligations under the agreement? Isn't it the federal government's obligation to see through that any party under an agreement meets the requirements of the agreement and doesn't prematurely terminate it?

ANSWER: The Civil Rights Division and Shelby County, Tennessee entered into a memorandum of agreement in December 2012 to address the results of an investigation by the Division into the operations of the County's juvenile justice system. The investigation looked into the operation and administration of the County's juvenile court, as well as the conditions of confinement for juveniles held in the County's Detention Center. During the implementation of the memorandum of agreement, Shelby County instituted a number of reforms. To ensure that it protects the constitutional rights of juveniles to receive due process and equal protection under the law, the County established and funded a juvenile unit in the public defender's office that represents the majority of juveniles who appear before the Juvenile Court. The County provides counsel to juveniles at both probation conferences and at court hearings. The County has also undertaken efforts to ensure that decisions made at different levels of the juvenile justice system are guided by objective criteria. There were multiple monitors who assessed the County's compliance with different portions of the memorandum of agreement. Their assessments and recommendations were advisory and non-binding. The Department appreciates and appropriately evaluates such recommendations, but ultimately made its decision based on the totality of the evidence. Finally, the County has taken numerous steps to prevent the unnecessary use of force in the Detention Center and to protect juveniles from the risk of suicide. In light of these efforts, the Division determined in October 2018 that the memorandum of agreement with Shelby County should be terminated.

17. DOJ's Office of Community Oriented Policing Services (COPS) spearheads the Collaborative Reform Initiative. Under this program, police agencies request DOJ's assistance with assessing police practices and recommending evidence-based reforms. **Is it correct that Jeff Sessions halted the practice of conducting COPS assessments even though dozens of police agencies were in the midst of implementing recommendations or undergoing assessments?**

ANSWER: The Collaborative Reform Initiative has returned to its original purpose of providing targeted assistance directly to local law enforcement based on their identified needs and requests. Instead of producing wide-ranging assessment and progress reports, the program will focus on providing real-time technical assistance to best address the identified needs of requesting agencies and to reduce violent crime. The changes to the program will fulfill the previous Attorney General's commitment to respecting local control and accountability, while still delivering important, tailored, technical assistance resources to state, local, and tribal law enforcement. In 2017, the Department of Justice announced an unprecedented grant award (<https://www.justice.gov/opa/pr/departments-justice-announces-unprecedented-award-police-executives-and-unions-create>) to a coalition of police leadership, unions and other law enforcement organizations to come together to provide tailored technical assistance for local policing agencies. This "by the field, for the field" approach embodies the fundamental goal of working with law enforcement to help identify and implement best practices in policing.

18. In 2018, the COPS Office launched a new initiative that allows police agencies to receive technical assistance from a network of national law enforcement organizations. **How many law enforcement agencies have participated in the revamped Collaborative Reform Initiative? Please identify the agencies.**

ANSWER: As of March 15, 2019, the COPS Office received a total of 161 requests for technical assistance. The requests include two types of recipients: (1) a primary requestor, which is an agency that initially contacts the Collaborative Reform Initiative Technical Assistance Center (CRI-TAC) and requests assistance, and (2) a peer agency addition, which is an agency that did not initially contact CRI-TAC but participated in the technical assistance by invitation of the primary requestor, CRI-TAC staff, or other law enforcement partners such as U.S. Attorneys' Offices. Peer agency additions have greatly increased the number of agencies CRI-TAC has been able to assist, primarily through multiagency training engagements. A list of agencies that have made requests to the CRI-TAC follows.

Law Enforcement Agencies that Requested CRI-TAC Technical Assistance

Alaska

North Slope Borough Police Department
Unalaska Department of Public Safety

Arizona

Cochise County Sheriff's Office
Pima County Sheriff's Office
Santa Cruz County Sheriff's Office
Yuma County Sheriff's Office

California

Bakersfield Police Department
California Department of Motor Vehicles-
Investigations Division
Escondido Police Department
Hayward Police Department
Kern County Sheriff's Office
Los Angeles County Sheriff's Office
Occidental Campus Safety Department
Occidental College Campus Safety
Department
Orange County Sheriff's Office
Placer County Sheriff's Office
Sacramento Police Department
San Diego County Probation Department
San Luis Obispo County Sheriff's Office
Santa Clara County Sheriff's Office
Stanislaus County Sheriff's Office
Ventura County Sheriff's Office
West Sacramento Police Department
Woodland Police Department
Yuba County Sheriff's Office

Colorado

Vail Police Department

District of Columbia

Metropolitan Special Police Department

Florida

Fort Myers Police Department

Georgia

Greene County Sheriff's Office

Iowa

Cedar Rapids Police Department

Illinois

Park Forest Police Department

Kansas

Parsons Police Department
Pittsburg State University Police
Riley County Police Department

Louisiana

McNeese State University Police
Department
Pineville Police Department
Southern University and A&M College-
Baton Rouge

Maryland

Calvert County Sheriff's Office
Cecil College Department of Public Safety
Charles County Sheriff's Office
Maryland Transportation Authority Police
St. Mary's County Sheriff's Office

Massachusetts

Abington Township Police Department
Acton Police Department
Ashby Police Department
Ayer Police Department
Boxborough Police Department
City of Attleboro Police Department
Dover Police Department
Dunstable Police Department
Fall River Police Department
Falmouth Police Department
Franklin Police Department
Groton Police Department
Lawrence Police Department
Littleton Police Department
Manchester-by-the-Sea Police Department

Massachusetts Alcoholic Beverages Control
Commission
Needham Police Department
Pepperell Police Department
Plymouth County Police Department
Shirley Police Department
Shrewsbury Police Department
Southborough Police Department
Swampscott Police Department
Town of Northborough Police Department
Townsend Police Department
Wellesley Police Department
Westford Police Department
Wrentham Police Department

Michigan

Port Huron Police Department
Saginaw Police Department
Warren Police Department

Missouri

Jasper County Police Department
Joplin Police Department
Missouri State Highway Patrol Troop D
Nixa Police Department
Taney County Police Department
Truman State University Department of
Public Safety

New Mexico

Grant County Sheriff's Office
New Mexico State University Police
Department

New York

Cornell University Police Department
Town of New Castle Police Department

North Carolina

Duplin County Sheriff's Office
Eden Police Department
Fayetteville State University Police
Department
Greenville Police Department
Kenansville Police Department

North Carolina Central University Police
Department
North Carolina Department of Motor
Vehicles, License and Theft Bureau
North Carolina State University Police
Department
North Carolina State University Police
Department
Wallace Police Department
Warsaw Police Department

Ohio

Cincinnati Police Department
Oberlin Police Department

Pennsylvania

Bristol Borough Police Department
Buckingham Township Police Department
Central Bucks Regional Police Department
Delaware Valley University Department of
Public Safety
Delaware Valley University Public Safety
Department
Franconia Township Police Department
Hatfield Township Police Department
Hatfield Township Police Department
Hilltown Township Police Department
Hollidaysburg Police Department
Lower Gwynedd Township Police
Department
Lower Makefield Township Police
Department
Lower Merion Township Police Department
Lower Moreland Township Police
Department
Lower Southampton Police Department
Middletown Township Police Department
Montgomery Township Police Department
New Hope Borough Police Department
Northampton Township Police Department
Palmer Township Police Department
Solebury Township Police Department
Upper Dublin Township Police Department
Upper Moreland Township Police
Department

Upper Southampton Township Police
Department
Warminster Township Police Department
Warrington Township Police Department
Whitpain Township Police Department
Yardley Borough Police Department

Puerto Rico
Caguas Municipal Police Department

South Carolina
Charleston Police Department

Tennessee
Knoxville Police Department

Texas
Allen Police Department
Anna Police Department
Collin County Sheriff's Office
Converse Police Department
Corpus Christi Police Department
Dewitt County Sheriff's Office
Dimmit County Sheriff's Office
Grayson County Sheriff's Office
Laredo Police Department
Lavaca County Sheriff's Office
Limestone County Sheriff's Office
Montgomery County Sheriff's Office
San Antonio Police Department
Tarrant County Sheriff's Office

Texas Department of Public Safety
Texas State Securities Board
Travis County Sheriff's Office
University of North Texas Police
Department

U.S. Virgin Islands
U.S. Virgin Islands Police Department

Vermont
Vermont Criminal Justice Training Council

Virginia
Alexandria Police Department
Galax Police Department
University of Virginia Police Department

Washington
Pierce County Sheriff's Office
Walla Walla Police Department

Wisconsin
Everest Metro Police Department
Jackson Police Department
Janesville Police Department
Marathon County Sheriff's Office
Wausau Police Department

Wyoming
Casper Police Department

19. Please give examples of the outcomes of the technical assistance provided by the COPS Office in the past year.

ANSWER: With the 2018 launch of the Collaborative Reform Initiative Technical Assistance Center (CRI-TAC), the COPS Office and its partners—the International Association of Chiefs of Police (IACP), and the Fraternal Order of Police (FOP), Major Cities Chiefs Association (MCCA), FBI National Academy Associates (FBINAA), International Association of Campus Law Enforcement Administrators (IACLEA), International Association of Directors of Law Enforcement Standards and Training (IADLEST), National Association of Women Law Enforcement Executives (NAWLEE), National Organization of Black Law Enforcement Executives (NOBLE), National Tactical Officers Association (NTOA), and National Sheriffs’ Association (NSA)—renewed its ability to provide the technical assistance for which the office is known in support of the nation’s law enforcement agencies. Since that launch, the CRI-TAC has fielded 161 requests for assistance on critical issues like school safety, active shooter response, de-escalation, crisis intervention, and intelligence and information sharing.

20. Recently, Secretary DeVos voiced her support for legislation creating a new federal tax credit for people and organizations that offer scholarships to students to attend private programs. Are all schools that receive federal dollars, including through tax credit programs, required to comply with federal antidiscrimination laws?

ANSWER: All public elementary and secondary schools and all public colleges and universities receive federal financial assistance in exchange for contractually agreeing to comply with federal civil rights laws prohibiting discrimination based on race, color, national origin, sex, disability, and age. These laws include the following statutes and their implementing regulations: Title VI of the 1964 Civil Rights Act, Title IX of the 1972 Education Amendments, Section 504 of the Rehabilitation Act of 1973, and the Age Discrimination Act of 1975. Private colleges and private universities that receive federal financial assistance (e.g., federal student loan programs) also agree to comply with these nondiscrimination requirements in exchange for this assistance. It is far less common for private elementary and secondary schools to receive federal financial assistance, but when they do, they also must comply with these requirements.

Most courts have held that typical tax credit programs, like tax benefits or exemptions, are not considered federal financial assistance subject to the funding statutes prohibiting discrimination. However, a few courts have found that a tax benefit constitutes federal financial assistance.

Independent of federal financial assistance, public schools, colleges, and universities must comply with Title II of the Americans with Disabilities Act, and private schools must comply with Title III of the Americans with Disabilities Act. Public elementary and secondary schools also must comply with the Equal Educational Opportunities Act of 1974, which prohibits various forms of discrimination based on race, color, national origin, and sex, regardless of whether these public schools receive federal financial

assistance. Public and private schools that employ fifteen or more employees also must comply with the nondiscrimination requirements of Title VII of the 1964 Civil Rights Act regardless of whether they receive federal financial assistance.

21. The Civil Rights Division enforces the Fair Housing Act (FHA) by filing lawsuits when there is a pattern of discrimination or where a denial of rights to a group of persons raises an issue of general public importance. **Has the Housing and Civil Enforcement Section filed any lawsuits to enforce the Fair Housing Act?**

ANSWER: The Housing and Civil Enforcement Section files lawsuits under the Fair Housing Act when there is a pattern or practice of discrimination or where a denial of rights to a group of persons raises an issue of general public importance. In addition, the Housing and Civil Enforcement Section files lawsuits under the Fair Housing Act when an individual files a complaint of discrimination with the Department of Housing and Urban Development (HUD), HUD issues a charge of discrimination, and a party elects to have the matter decided in federal court. Since 1968, the Housing and Civil Enforcement Section has filed approximately 2,000 lawsuits to enforce the Fair Housing Act.

22. Americans with disabilities are less likely to be employed today than they were before the American Disabilities Act (ADA) took effect in 1990.⁴ Those that do work are often in low-paying jobs and they earn considerably less than someone without a disability in the same occupation. This would indicate a need for increased enforcement in this area. **Is it correct that the Civil Rights Division's cases related to disability rights have fallen⁵ by almost 60% since the last administration? If not, what is the percent change in new filings compared to that of the prior administration?**

ANSWER: The Civil Rights Division agrees that barriers to employment for people with disabilities persist, including discrimination in the workplace, and that dismantling discriminatory barriers to employment is critical to advancing a central purpose of the ADA – assuring economic self-sufficiency. For this reason, the Division maintains a robust enforcement and technical assistance program, as described in more detail below in response to Question 23, to remedy discrimination against people with disabilities in employment.

The Division is unable to comment on the 60% figure referenced in Question 22, because there is no context or explanation for how that figure was derived. However, a complete picture of the violations remedied and relief provided to aggrieved individuals should include settlement agreements obtained by the Division. The vast majority of enforcement matters are resolved through settlement agreements prior to active litigation, and the Division actively monitors its agreements to ensure that discriminatory policies, practices, or barriers are eliminated and that aggrieved individuals obtain all relief committed to them in the agreements. The Division has reached more settlement

⁴ <https://thehill.com/blogs/congress-blog/politics/398890-we-cant-take-civil-rights-laws-for-granted>

⁵ https://news.vice.com/en_us/article/biq37m/exclusive-trumps-justice-department-is-investigating-60-fewer-civil-rights-cases-than-obamas

agreements in each of the last two fiscal years than in each of the years 2008-2016, except one year, 2015.

23. What more is DOJ planning to do to address systemic inequities facing disabled people in the work place?

ANSWER: The Disability Rights Section plans to continue its active enforcement of Title I of the ADA to redress disability discrimination in employment by state and local government employers. (Only the Equal Employment Opportunity Commission has jurisdiction to enforce Title I against private sector employers.) The Department has filed six ADA Title I cases since January 2017, including one case that also brought a claim under the Genetic Information Nondiscrimination Act of 2008 (GINA). It has several other ongoing investigations that are not public, and it continues to review complaints and referrals it receives to determine whether enforcement action is warranted.

Enhancing its Title I enforcement program, the Department has a Memorandum of Understanding with the Equal Employment Opportunity Commission regarding ADA and GINA employment discrimination charges against state and local governments (MOU). This MOU promotes interagency coordination and seeks to maximize effort, promote efficiency, and eliminate duplication and inconsistency in the enforcement of federal employment discrimination laws.

The Department also conducts outreach to inform public and private employers of their nondiscrimination obligations under the ADA. Since January 2017, the Department conducted outreach to employers and other stakeholders at 14 separate events.

In addition, under Title II of the ADA, the Department enforces the rights of people with disabilities, who are unnecessarily receiving services in segregated day and employment programs, to have opportunities to work in competitive, integrated jobs in the community, earning at least minimum wage. For example, the Department reached a settlement agreement with the State of Louisiana last summer addressing the unnecessary institutionalization of people with mental health disabilities in nursing facilities. That agreement provides, among other services, opportunities for people to receive supported employment services to enable them to obtain competitive employment in the community.

Also under Title II of the ADA, the Department continues to monitor agreements with Rhode Island and the City of Providence to provide integrated employment services to people with disabilities. These agreements have been impactful. Between 2017 and 2018, it has been reported that Rhode Island catapulted from 47th to 19th in the nation for disability employment. In 2018, 7,758 individuals with disabilities entered the workforce in Rhode Island, bringing the State's disability employment rate up by 10.6% to 40.6%. The Department also continues to monitor a similar agreement with Oregon. According to Oregon's data, since the beginning of its fiscal year 2014, over 5,000 individuals have received new supported employment services, and since the beginning of the State's fiscal year 2015, the State has provided supported employment services and related

employment services so that over 600 people have newly obtained competitive integrated employment.

Additionally, representatives from the Civil Rights Division currently serve on the Panel on the Department of Defense (DOD) and AbilityOne Contracting Oversight, Accountability, and Integrity (Panel), which was created by Congress as part of the National Defense Authorization Act of 2017. The AbilityOne program promotes the employment of individuals who are blind or have significant disabilities through contracts with the federal government. The Panel has several duties, including recommending actions the DOD and the AbilityOne Commission may take to eliminate waste, fraud, and abuse with respect to contracts of the DOD and AbilityOne Commission; and recommending actions to ensure opportunities for the employment of significantly disabled veterans and the blind and other severely disabled individuals. The first report to Congress, in July 2018, included recommendations to amend the statute governing the program, the Javits Wagner O'Day Act, to modernize the AbilityOne program and bring it into compliance with current disability rights laws and policies requiring competitive integrated employment.

24. In 2017, DOJ filed an amicus brief in the Second Circuit arguing that the Civil Rights Act does not prohibit employment discrimination on the basis of sexual orientation. This position conflicts with EEOC guidance and an earlier decision by the Seventh Circuit Court of Appeals. The court found that Title VII does prohibit employment discrimination based on sexual orientation. **Did DOJ consult with EEOC before changing course?**

ANSWER: The Department cannot respond to this question as it is currently the subject of ongoing litigation and pending before the Supreme Court.

**The Honorable Grace Meng
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record**

Civil Rights Division Oversight Hearing

Census Citizenship Question

1. The last time there was a citizenship question on a decennial census form that goes to 100% of the households was in 1950. The Voting Rights Act was not enacted until 1965. Given the record of the Voting Section, it is clear that the DOJ has been enforcing the Voting Rights Act for over 50 years without the need for collection of citizenship data from the decennial census form that goes to 100% of households. **Which cases in the last 54 years of the Voting Rights Act enforcement has the Justice Department lost because it did not have the citizenship information?**

ANSWER: The United States' appeal of the district court decisions invalidating Secretary Ross's decision to reinstate a citizenship question on the 2020 Census questionnaire is pending before the United States Supreme Court. Therefore, it would be inappropriate for the Department of Justice to comment on this matter.

2. At the hearing on March 12th, AAG Dreiband stated he was not familiar with the American Community Survey (ACS). **Please clarify this statement.**

ANSWER: The American Community Survey is a survey provided by the United States Census Bureau on a yearly basis to receive information about our nation that allows for communities to address the needs of its people through public accommodations including schools, emergency services, and hospitals.

3. **Has DOJ previously used citizenship data from the ACS to protect voting rights?**

ANSWER: The United States' appeal of the district court decisions invalidating Secretary Ross's decision to reinstate a citizenship question on the 2020 Census questionnaire is pending before the United States Supreme Court. Therefore, it would be inappropriate for the Department of Justice to comment on this matter.

Hate Crimes Reporting

4. The FBI has been collecting hate crime statistics data from federal, state, and local law enforcement officials since 1980. In 2017, the most recent data available, 92 police departments in cities over 100,000 in population either affirmatively reported that they have zero hate crimes or did not report data to the FBI at all. **What steps can the Civil Rights Division and the Justice Department take, in coordination with the FBI, to improve comprehensive and 100% reporting of hate crimes?**

ANSWER: The Department has been exploring ways to improve the comprehensive reporting of hate crimes statistics, including:

- In November 2018, the FBI released its Hate Crime Statistics for 2017, the most recent year available. Those statistics compile reports from federal, state, local, and tribal law enforcement agencies across the country. The number of hate crime incidents reported to the FBI increased about 17 percent in 2017 compared with the previous year. Law enforcement reported 7,175 hate crimes to UCR in 2017, up from 6,121 in 2016. Although the numbers increased in 2017, so did the number of law enforcement agencies reporting hate crime data—with approximately 1,000 additional agencies contributing information.
- In October 2018, the National Institute of Justice (NIJ) at the OJP announced a grant of more than \$840,000 to the University of New Hampshire to conduct a national survey of hate crime incidents and victimization. See <https://www.justice.gov/opa/pr/justice-department-releases-update-hate-crimes-prosecutions-and-announces-launch-new-hate>. The multi-phase study will provide detailed data about hate crimes, analyze local policies that impact hate crime reporting, and identify successful investigation and prosecution strategies. The study will survey 3,000 law enforcement agencies to collect information on rates of reported hate crime incidents, gather profiles of hate crime offenders, and capture challenges in defining, investigating and documenting hate crimes. The second follow-up phase will survey 250 prosecutors about cases that ended in arrest. The study will run through 2021 and include a report on the findings.
- The FBI’s Uniform Crime Reporting (UCR) Program is assisting local, state, tribal, and federal law enforcement agencies nationwide to transition to the National Incident-Based Reporting System (NIBRS). Thousands of agencies already participate in NIBRS, and the FBI has received thousands of commitments from additional law enforcement agencies across the nation to become NIBRS-compliant by January 1, 2021. NIBRS includes a designated field for law enforcement agencies to report hate crimes. Thus, reporting information to the FBI through NIBRS will improve the quality, reliability, and accuracy of hate crime data. Further, in an effort to improve hate crime data collection even before NIBRS is adopted nationwide, during 2018, the FBI trained nearly 1,506 law enforcement agencies about hate crime data collection.

Domestic Terrorism and White Supremacy

5. According to the recent Anti-Defamation League’s report, domestic extremists committed at least 50 murders in the U.S. in 2018, and every single one – from Pittsburgh to Parkland – had a link to right-wing extremism. **What is the role of the Civil Rights Division in addressing the threat of bias-motivated extremist violence? How will you prioritize DOJ resources to address this threat?**

ANSWER: The Department condemns all forms of hate groups, including white nationalists, white supremacists, the Ku Klux Klan, and Neo-Nazis. As Attorney General Barr recently stated after the attack on mosques in New Zealand: “Violence on the basis of religion is

evil.” And as then-Attorney General Jeff Sessions said when the Department indicted James Alex Fields, Jr., in Charlottesville: “At the Department of Justice, we remain resolute that hateful ideologies will not have the last word and that their adherents will not get away with violent crimes against those they target.” Combatting hate crimes is and will remain one of the highest priorities of the Department and of its Civil Rights Division. The Department’s goal is the complete eradication of bias-motivated and hate crimes from our communities and our country.

The Department’s determination is most visible in its response to hate crimes. The Department moved swiftly to seek an indictment after the attack at the Tree of Life synagogue in Pittsburgh, Pennsylvania. A superseding indictment now charges Robert Bowers with 63 counts, including federal hate crime and firearm charges. Since January 2017, the Department has indicted more than 50 defendants involved in committing hate crimes (including, but not limited to, over 20 defendants charged with violating 18 U.S.C. § 249, 14 charged with violating 18 U.S.C. § 247, 9 charged with violating 42 U.S.C. § 3631, and 3 charged with violating 18 U.S.C. § 245). During that same time, the Department has obtained convictions of over 40 defendants involved in committing hate crime incidents (either through plea or after trial by jury). These convictions include, but are not limited to, 13 convictions for § 249 offenses; 10 convictions for § 247 offenses; 9 convictions for § 3631 offenses; 3 convictions for § 245 offenses; and 10 convictions for § 241 offenses (conspiracy to violate civil rights).

Since January 2017, the Department has taken several significant actions to advance the fight against hate crimes. For example, the Department recently established a Department-wide Hate Crimes Enforcement and Prevention Initiative (Initiative) led by the Civil Rights Division. This new Initiative coordinates the Department’s efforts to eradicate hate crimes; facilitates training, outreach, and education to law enforcement agencies and the public at the federal, state, local, and tribal levels; and follows up on the productive discussions between the Department and stakeholders that took place at a Hate Crimes Summit that the Department hosted in June 2017.

The FBI’s most recent UCR data shows an increase in reported hate crimes over the past two years. In interpreting this data, it is important to remember that most crimes, including hate crimes, are still under-reported, making it difficult to properly determine whether the actual commission of hate crimes has increased and complicating our ability to prioritize resources to prevent or deter such crimes. Accordingly, the Department has established an internal working group to explore ways to improve the compilation and aggregation of hate crimes statistics. The FBI UCR Program will be a critical tool, transitioning all state, local, and tribal law enforcement agencies nationwide to the National Incident-Based Reporting System (NIBRS) by January 1, 2021. NIBRS includes a designated field for law enforcement agencies to report hate crimes, so reporting through NIBRS will improve the quality, reliability, and accuracy of hate crime data.

The Department has been working to improve hate crime data collection in other ways, even before NIBRS is adopted nationwide. For example, in October 2018, the Initiative hosted a roundtable discussion to listen to our state and local partners to determine, from the

prospective of our partners, what hurdles exist to reporting such crimes. In 2018, the FBI trained 1,506 law enforcement agencies about hate crime data collection.

All of the Department's efforts represent a concerted, committed, and integrated approach to combatting hate crimes.

6. **Given the recent tragedy that unfolded at a New Zealand mosque and the revelation that there lacks arrangement for sharing intelligence about domestic terrorist organizations, including right-wing extremists, what will the Civil Rights Division do to ensure greater cross-sharing of said intelligence?**

ANSWER: The Civil Rights Division is not a traditional intelligence-gathering entity and defers to the FBI and similar federal law enforcement agencies to provide information, as appropriate, to international partners. However, the Division has worked with the FBI to share information with Israeli authorities when investigating the case of *United States v. Kadar*. In addition, the Division routinely shares investigative information with law enforcement and prosecutorial partners. For example, Division attorneys work closely with its state, local, and tribal law enforcement partners to share the efforts of its investigations to determine the appropriate venue for prosecution of a particular hate crime.

Moreover, the Civil Rights Division and U.S. Attorney's Offices engage regularly with communities on hate crime issues (including through national, regional, and local conferences, forums, and town halls) to ensure that communities are aware of the risks they face, the laws that protect them, and how to report possible hate crimes.

Religious Liberty and state-sanctioned discrimination

7. Two months ago, the Department of Health and Human Services granted a waiver from federal non-discrimination requirements to South Carolina's Foster Care Program, which has contracted with a child welfare provider who seeks permission to refuse to serve prospective parents who do not share their religious beliefs, but who wants to continue to receive federal funding to provide those services. South Carolina requested the waiver to allow federal funds to go to a child welfare agency that refused to place children with Jewish families. Last month 120 organizations that make up the Coalition Against Religious Discrimination wrote to denounce this HHS funding and urge reconsideration. **Do you believe that faith-based organizations that provide federally-funded social services have the right to discriminate against beneficiaries, who refuse to participate in an organization's privately-funded religious activities as a condition of receiving publicly funded services?**

ANSWER: The Department of Justice, through its Civil Division, represents the Department of Health and Human Services in a lawsuit brought by a woman challenging the waiver that you describe. I therefore am unable to respond to your question, but would refer you to the United States' filings in this case as it progresses.

8. **Do you believe there must be a religious litmus test to determine qualified and caring parents who want to foster and adopt these children that seek a loving home?**

ANSWER: I am unable to respond to this question because of the ongoing litigation described in response to question 7 above.

Hate Crimes against LGBT Community

9. Even with this underreporting, almost 16% of all hate crimes reported to the FBI in 2017 were directed against LGBT people, with another 2% of all reported hate crimes directed against transgender people. **Do you believe there is any connection between violence and hate against the LGBT community and government actions such as rescinding federal protections for transgender students, attempting the ban of transgender people from the military, and efforts the Department has taken to argue that LGBTQ people are not covered by the protections afforded under Title VII of the Civil Rights Act?**

ANSWER: No. It is the published policy of the Department of Justice that DOJ “must and will continue to affirm the dignity of all people, including LGBT individuals.” The Department does not condone mistreatment on the basis of LGBT status. Laws that are enforced by the Civil Rights Division that prohibit discrimination on the basis of sex protect all persons from sex discrimination including transgender and LGBT individuals. These laws are aggressively enforced by the Civil Rights Divisions, as are laws that prohibit discrimination on the basis of LGBT status. With respect to Title VII of the Civil Rights Act of 1964, for the first 50 years after its passage, the federal government and the courts consistently have interpreted the prohibition against sex discrimination in Title VII to prohibit discrimination based on biological sex. Notably, Congress has specifically prohibited discrimination based on LGBT status in other statutes, as a separate protected category in addition to “sex” or “gender.” *See, e.g.*, 18 U.S.C. 249(a)(2)(A) and (c)(4) (prohibiting acts or attempts to cause bodily injury to any person “because of the actual or perceived religion, national origin, gender, sexual orientation, gender identity, or disability of any person,” and defining “gender identity” as “actual or perceived gender-related characteristics” (emphasis added)); 34 U.S.C. 12291(b)(13)(A) (Supp. V 2017) (prohibiting discrimination in certain federally funded programs “on the basis of actual or perceived race, color, religion, national origin, sex, gender identity (as defined in paragraph 249(c)(4) of Title 18), sexual orientation, or disability” (emphases added)). It has not included similar language in Title VII.

**The Honorable Marcy Kaptur
Subcommittee on Commerce, Justice, Science, and Related Agencies
Questions for the Record**

Civil Rights Division Oversight Hearing

1. Attorney General Sessions issued a memo purporting to limit the use of consent decrees in civil rights enforcement as his last act in office. Consent decrees are critical enforcement tools as they put all the parties on the record and involve the court to ensure decrees continue to be enforced and protect the American people's interest. **What has been the impact of this memo?**

ANSWER: The Division has continued, and will continue, to uphold and enforce the federal civil rights law to the best of its ability. The Department is committed to aggressively defending and protecting our citizens' civil rights and the environment. Consent decrees can, under certain circumstances, be one tool, but not the only tool and certainly not the default tool, in protecting civil rights and ensuring public safety. The Civil Rights Division traditionally uses consent decrees, Rule 41 agreements, settlement agreements, and MOUs as means to resolve civil rights lawsuits. Since the implementation of former Attorney General Sessions's memo, the Division has primarily relied on settlement agreements to resolve civil rights lawsuits and has not entered into a consent decree.

2. **How many consent decrees have been entered into by the Civil Rights Division in this administration by Section?**

ANSWER: Please see my answer to question 1 above.

3. The Supreme Court has permitted the use of disparate impact to prove discrimination in Fair Housing cases. *See, Texas Department of Housing v. Inclusive Communities*. The administration has attacked the Court's decision and the use of this theory. The Supreme Court clarified that Congress intended, and DOJ has the authority to aggressively use the authorities to attack housing discrimination. **What impact has this had on the work of the Housing Section of the Civil Rights Division?**

ANSWER: The Civil Rights Division has used, and will continue to use the disparate impact theory recognized in *Inclusive Communities* where appropriate.

4. **Please identify cases that the Housing Section is pursuing that apply a disparate impact theory under *Inclusive Communities*.**

ANSWER: *Fortune Society, Inc. v. Sandcastle Towers Housing Development Fund, Corp.*, (E.D.N.Y.)

On October 18, 2016, the United States filed a statement of interest in *Fortune Society, Inc. v. Sandcastle Towers Housing Development Fund Corp.* (E.D.N.Y.). The plaintiff in the case

is an organization that helps formerly incarcerated individuals find housing. Its complaint challenges the practices of an affordable rental apartment complex with 917 units in Far Rockaway, Queens. The statement of interest seeks to assist the court in evaluating whether a housing provider's policy that considers criminal records in an application process produces unlawful discriminatory effects in violation of the Fair Housing Act. This matter is pending with the court. Further information about the United States' statement of interest is available here: <https://www.justice.gov/crt/housing-cases-summary-page#sandcastle>.

Loveless v. Euramex Management Group, LLC (Wesley Apartment Homes, LLC)

On October 20, 2017, the United States entered into a settlement agreement resolving a Fair Housing Act referral from the Department of Housing and Urban Development (HUD). HUD charged the owner and property manager of an apartment complex in Atlanta, Georgia with discriminating on the basis of race and color when they evicted a tenant pursuant to a criminal record screening policy. The settlement requires the owner and property manager to adopt and implement non-discriminatory procedures for screening tenants and applicants, and to train employees who interact with tenants and applicants on the Fair Housing Act. The settlement agreement expires on October 20, 2019. Further information about this matter is available here: <https://www.justice.gov/crt/housing-cases-summary-page#loveless>.

United States v. Town of Oyster Bay et al. (E.D.N.Y.)

On April 10, 2014, the United States filed a complaint in *United States v. Town of Oyster Bay* (E.D.N.Y.), alleging that the Town of Oyster Bay, the town supervisor, and the Long Island Housing Partnership ("LIHP") engaged in a pattern or practice of discrimination against African Americans, in violation of the Fair Housing Act, through the use of residency preferences in the administration of two affordable housing programs, one for first-time homebuyers and one for seniors. The United States' lawsuit against the Town of Oyster Bay and the Town Supervisor is pending. The United States' lawsuit against LIHP was resolved by a settlement agreement that was filed with the court at the same time that the United States filed its complaint. More information about this matter is available here: <https://www.justice.gov/crt/housing-cases-summary-page#oysterbay>.

5. From what I can tell, the Housing Section does not appear to have brought a single Fair Housing case based on race discrimination in this administration. **Can you explain whether this is true and explain for the record how many race discrimination fair housing cases the administration has brought from fiscal year 2015-2019? Why would DOJ be ignoring such a powerful tool to enforce the law?**

ANSWER: It is not true that the Housing and Civil Enforcement Section has not brought a single Fair Housing Act case based on race discrimination in the current administration. During the current administration, the Housing Section has filed the following cases alleging race discrimination under the Fair Housing Act: *United States v. Dyersburg Apartments* (W.D. Tenn.), alleging that defendants denied the rental application of an African-American man because of his criminal record, despite contemporaneously approving the rental applications of two white applicants with felony convictions, and *United States v. Government of Guam* (D. Guam), alleging that enforcement of the Chamorro Land Trust Act

and its implementing regulations discriminates against non-Chamorros on the basis of race or national origin, in violation of the Fair Housing Act. In addition, the Department of Justice has filed statements of interest in *National Fair Housing Alliance v. Facebook* (S.D.N.Y.) and *Omuoha v. Facebook* (N.D. Cal.), supporting plaintiffs' position that the Communications Decency Act does not bar a Fair Housing Act lawsuit alleging that Facebook's classification of its users and its ad-targeting tools permit landlords, developers, and housing service providers, among others, to limit the audience for their ads based on race, national origin, sex, religion, and familial status.

Cases filed by the Department of Justice alleging race discrimination under Fair Housing Act:

FY15: 9 cases

FY16: 4 cases and 1 statement of interest

FY17: 4 cases and 2 statements of interest

FY18: 1 statement of interest

FY19 through 4/30/19: 1 case and 1 statement of interest

6. The Civil Rights Division has both the training and expertise to serve as a resource for communities facing hate crimes. **For the record, could you please outline for the committee how many hate crimes enforcement actions you have budgeted for in FY 2020?**

ANSWER: The Civil Rights Division, in partnership with U.S. Attorney's Offices, engages regularly with communities on hate crime issues (including through national, regional, and local conferences, forums, and town halls) to ensure that communities are aware of the risks they face, the laws that protect them, and how to report possible hate crimes. This outreach is considered a critical component of our hate crimes enforcement program.

The Department does not, and cannot, budget for a specific number of enforcement actions for a particular year. Rather, we budget across all of the Division's enforcement areas and these requests reflect priorities across those areas. Until hate crimes arise, it is impossible to know what the number will be or to know how many of these hate crimes are amenable to prosecution under federal hate crime laws. Rest assured, however, that our goal remains the complete elimination of hate crimes and bias-motivated violence from our communities, and we will continue to take aggressive and appropriate steps to achieve that goal.

7. **What increased travel and training resources are you making available to your line attorney's to pursue hate crime cases?**

ANSWER: The Civil Rights Division's Criminal Section does not budget travel by type of case. Travel funds are available for all cases prosecuted by the Section. Attorneys are encouraged to travel when necessary for mission-critical work, including for all phases of investigating and prosecuting hate crimes. Section attorneys may travel to conduct trial or grand jury proceedings, to meet witnesses early in an investigation, or to participate with our

partners in the FBI and U.S. Attorney's Offices in determining whether to pursue federal prosecution.

The Civil Rights Division takes great pride in its robust training program, which provides Division line attorneys with the tools they need to identify, investigate, and prosecute hate crimes. These trainings include: (1) large, live trainings conducted at least every other year at the National Advocacy Center (NAC); (2) supplemental symposiums and similar trainings given at the NAC or other DOJ venues; (3) video trainings for AUSAs and trial attorneys available on LearnDOJ, the Department's electronic learning management system; (4) written resources, including a chapter on hate crimes that will be prepared in the new version of the Violent Crimes Prosecution Manual and an article on federal hate crimes drafted for USA Book published in January 2018; and (5) participation and consultation in trainings that FBI Civil Rights Unit (CRU) provides to its agents. In addition to these trainings developed for Department-wide dissemination, the Division takes additional steps to train its own line attorneys. The Division periodically holds orientation trainings for its own, newly hired attorneys, covering each statute the Division enforces along with information about investigative and trial strategies. In addition, when attorneys first arrive in the Division, they are paired with a senior attorney for their first few cases to receive the benefit of one-on-one mentoring.

WEDNESDAY, MARCH 13, 2019.

GUN VIOLENCE PREVENTION AND ENFORCEMENT

WITNESSES

THOMAS E. BRANDON, DEPUTY DIRECTOR, BUREAU OF ALCOHOL, TOBACCO, FIREARMS AND EXPLOSIVES

CHRISTINE HALVORSEN, ACTING ASSISTANT DIRECTOR, CRIMINAL JUSTICE INFORMATION SERVICES, FEDERAL BUREAU OF INVESTIGATION

Mr. SERRANO. The subcommittee will come to order. We welcome everyone to our fourth hearing of the year. Today we are going to examine gun violence prevention and enforcement efforts.

There is an epidemic of gun violence in our Nation and this subcommittee has a key role to play in the urgently needed response as we oversee the Federal law enforcement agencies tasked with overseeing gun dealers, investigating gun crimes, and running our background check system, among other things. That is why I am pleased to welcome our two witnesses today; Thomas Brandon, the Deputy Director and head of the Bureau of Alcohol, Tobacco, Firearms and Explosives, also known as ATF; and Christine Halvorsen, the Acting Assistant Director for Criminal Justice Information Services, or CJIS, pronounced CJIS, at the Federal Bureau of Investigation. CJIS, among other things, operates the National Instant Criminal Background Check, more commonly known as NICS, pronounced as NICS.

Both agencies play a crucial role in preventing gun crimes before they occur and investigating them once they do. You also have a key role in the policymaking and the public to better understand how guns fall into the wrong hands; how our government oversees our Nation's firearms dealers and buyers; and what we need to prioritize. Both agencies also have a key role in working with state and local law enforcement in these goals.

There are a large number of issues that have raised concerns on both sides of the aisle in recent years, from oversight over federally licensed gun dealers to loopholes in our background checks system, to delayed denials to gun trafficking, to the need to more rapidly trace the sources of crime guns. The list goes on and on.

Unfortunately, we in Congress have too often failed you just as well. Given the diversity and seriousness of your missions, we have too often underfunded some of your critical functions.

Right now, for instance, the New York City Police Department has more than 39,000 officers and more than 19,000 administrative staff; as of 2019, the ATF has a total of 5,109. Given your responsibilities, I think it is safe to say that an increase in staffing is sorely needed.

On the NICS side, funding has grown over time to help states maintain and update their background check databases, and con-

tinued NICS funding is vital to ensuring that the background check database is accurate.

Lastly, we also cannot discuss enforcement of our gun laws without also mentioning previous legislative actions taken by Congress that have impeded ATF's ability to prevent and investigate gun violence. This committee, unfortunately, has a long history of interfering in some commonsense policies to ensure that the ATF can act in ways that are effective and efficient. Hopefully, we will get a chance to discuss the impact of those choices today.

I represent a community that is far too often subject to gun violence, like so many Members do, not only in this committee, but in Congress. We are not far from the issue of illegal guns to have moved from a legitimate federally licensed firearms dealer to an illegitimate source. So far this year, we have had 29 shootings in the Bronx. I think we can all agree that this is too many and that we need to act to prevent this from happening.

Gun crimes happen all over our Nation and not a day goes by without a firearms-related death. This violence has a serious impact on our neighborhoods, not only the serious physical and emotional impact on families, but also the psychological impact on the broader community at large. Two weeks ago, the House took a step toward addressing this epidemic. I look forward to working with the agencies here today to determine what steps we can take next.

So, we welcome you again. And, with that, I recognize Mr. Aderholt, my partner.

Mr. ADERHOLT. Thank you, Mr. Chairman, for yielding, and I would like to welcome our two witnesses to the hearing this morning. It is good to have you here this morning.

The primary criminal enforcement mission of the Bureau of Alcohol, Tobacco, Firearms and Explosives is to protect the public from violent crimes. Similarly, the Federal Bureau of Investigation's predominant mission is to protect the American public from dangerous criminal threats.

As such, Direct Halvorsen and Deputy Director Brandon, I know you are both experts on the topic of violence crime and public safety, and so that is why we certainly welcome your presence here to the subcommittee this morning. I look forward to your insights and learning more about the comprehensive efforts that are underway at your respective agencies to better understand crime trends and modernize our Nation's efforts to respond to them.

The complexity of violence and the very nature of criminal behavior, as was just mentioned in the Chairman's remarks, make predicting and preventing incidents of violence extremely difficult. For this reason, I deeply appreciate the extraordinary efforts of your agencies to work with your Federal, state and local partners to address the violent issues of firearms with the help of advanced technology, the improved intelligence, better coordination, and targeted training and also enforcement.

All too often, as the case, some in Washington and members of the media want to blame the presence of guns for acts of violence, and use tragedy as the very reason to restrict fundamental rights to bear arms. I believe the Founding Fathers wisely included the Second Amendment in the Bill of Rights, and this fundamental

freedom protects the right of gun owners and in turn restrains the presence of criminal activity and tyranny.

I firmly believe that restricting the rights of gun owners is not the answer to the issues that we have seen and to the criminal misuse of firearms in general.

So, with that, I thank the chairman for holding this important hearing, and I yield back and look forward to your testimony.

Mr. SERRANO. Thank you, Mr. Aderholt.

Director Brandon, it is time for your opening remarks. Please try to keep your statement to 5 minutes and, as always, your full statement will be inserted in the record.

Mr. BRANDON. Yes, sir.

Well, Chairman Serrano and Ranking Member Aderholt, and members of the committee, my name is Thomas Brandon and I serve as the Deputy Director for the Bureau of Alcohol, Tobacco, Firearms and Explosives, known as ATF. As head of the agency representing the men and women of the ATF, I want to thank you for your invitation to appear before you today in order to address ATF's role in combating gun violence.

The plague of gun violence has enormous impact across America, from Charleston to Pittsburgh, from Columbine to Parkland, and throughout our Nation. Whether you live in a big city or a rural community, whether it is our children in schools, adults at work, or families attending religious services, no one is immune to the impact. While a mass shooting captures the attention of the nightly news, the daily occurrence of firearms-related violent crime in many of our neighborhoods takes a heavy toll on the hearts of the entirety of this great Nation.

ATF shares the Nation's desire to combat gun violence; it is our job and it is what we do every day. ATF's mission to protect our communities from violent criminals, criminal organizations, the illegal use and trafficking of firearms, and the illegal use and storage of explosives, and acts of arson and bombings.

I often say ATF's goal is to be a better partner and that is why a major key to ATF's impact on enhancing public safety is the work we do every day in partnership with our state and local law enforcement agencies. We seek to achieve this goal through hard work in the trenches and through the unique expertise we provide. The resources we provide to our partners include the National Integrated Ballistics Information Network, known as NIBIN, and firearms tracing, the two federal resources the Major City Chiefs Association has identified as far and away the most valuable federal resources they use in their fight against firearms violence.

ATF is a small agency with a big mission. Today I would like to provide you with some examples of what we do with the resources you all give us, and hope these examples point to what we can do to have an even bigger impact in combating violent crime in the future. In my written statement, as you mentioned, I provided a more complete list of what we do with the resources you give us, but for my oral testimony I will highlight just a few.

For the past several years, we have been assessing how we use the tools we have in order to be ahead of the curve with regard to violent crime. In fact, I would say we have played a significant role in actually changing the nature of criminal investigations, driving

change in a way that we use technology and thus helping to drive change in the way our local law enforcement partners use technology.

An example of our efforts to expand our investigative abilities is the transformation of ATF's NIBIN. When a firearm is discharged, it ejects a shell casing, leaving behind unique markings on the casing. NIBIN is the only nationwide network that allows for the capture and comparison of 3-D ballistic images of spent shell casings recovered from crime scenes and crime gun test fires. In the past, the technology existed primarily in our labs to generate evidence for judicial proceedings, but our efforts have directly caused NIBIN to become an investigative leads generator, often linking crimes previously thought to be unrelated.

Since 2016, ATF has provided these NIBIN matching services at one centralized location in Huntsville, Alabama called our National Correlation and Training Center. Correlation is the process of comparing images in the NIBIN system and is cost-prohibitive for many police departments nationwide. Currently, ATF conducts correlation reviews for more than 250 law enforcement agencies, with results within 48 hours or less. We plan to continue to expand this essential service and our goal would be to offer it to all NIBIN participants by the end of fiscal year 2020.

The success of NIBIN is illustrated by a case recently adjudicated in Detroit, Michigan. In January 2017, a nonfatal shooting occurred at a Detroit gas station. Months later, in April 2017, there was another shooting, this one fatal, at a different gas station. By collecting the shell casings at both scenes and using surveillance footage from the first nonfatal shooting, investigators were able to link up both casings to a single suspect, who was arrested and successfully prosecuted.

A study conducted by Rutgers University regarding the use of NIBIN in New Jersey found that when you have two shootings matched through NIBIN there is a 50-percent chance that the firearm is going to be used in another shooting in the next 90 days. Our protocols are designed to identify and arrest those violent criminals as soon as possible to prevent them from engaging in more violence.

As these NIBIN machines and our correlation capabilities are implemented across the country, ATF will be able to integrate data from localities throughout the network, allowing our experts in Huntsville to generate an even higher volume of actionable investigative leads.

Violent crime knows no boundaries, so our work at the national level supporting local law enforcement is a key part of connecting the dots across judicial boundaries.

NIBIN is also the cornerstone of another way we continue to transform criminal investigations, through our Crime Gun Intelligence Centers.

Located in each ATF field division, Crime Gun Intelligence Centers are collaborative efforts that use cutting edge technology and a dedicated investigative team to identify shooters and their sources of crime guns. Our Crime Gun Intelligence Center best practices have revolutionized the way criminal investigations are conducted, bringing NIBIN and our firearms tracing capabilities

into a one-stop shop. This allows us the ability to direct our intelligence to go after the trigger pullers in an even more efficient and effective way than ever before.

Let me provide a real-life example from New York as to how we use Crime Gun Intelligence. In 2009, an enforcer in a violent drug-trafficking organization shot and killed the mother of two children. In 2010, another member of this organization was shot and killed because they feared he would cooperate with law enforcement. NIBIN linked those two murders to the same gun and our application of crime gun intelligence, now generated in all Crime Gun Intelligence Centers, assisted in identifying and arresting the shooter, who in 2017 was sentenced to life in prison plus 10 years.

Chairman Serrano, Ranking Member Aderholt, and members of the subcommittee, I hope I have relayed why I feel that your investment in ATF is money well spent. We know that in order to fight violent crime we must be an integrated and resourceful organization, nimble in responding to an ever-changing environment with technological sophistication. ATF personnel know there is no higher priority than protecting the American public.

Thank you for your time and I am happy to answer any questions you may have.

[The information follows:]



Department of Justice

STATEMENT OF

**THOMAS E. BRANDON
DEPUTY DIRECTOR**

BUREAU OF ALCOHOL, TOBACCO, FIREARMS AND EXPLOSIVES

BEFORE THE

**SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND
RELATED AGENCIES**

**COMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES**

FOR A HEARING ENTITLED

GUN VIOLENCE PREVENTION AND ENFORCEMENT

PRESENTED

March 13, 2019

**Statement for the Record of Thomas E. Brandon
Deputy Director
Bureau of Alcohol, Tobacco, Firearms and Explosives
March 13, 2019**

Chairman Serrano, Ranking Member Aderholt, my name is Thomas Brandon, and I serve as the Deputy Director of the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF). As head of the agency representing the men and women of ATF, I want to thank you for your invitation to appear before you today in order to address the role of ATF in combatting gun violence.

The plague of gun violence has had an enormous impact across America, from Charleston to Pittsburgh; from Columbine to Parkland; and throughout our nation. Whether you live in a big city or a rural community, whether it is our children in schools, adults at work, or families attending religious services, no one is immune to the impact. While a mass shooting captures the attention of the nightly news, the daily occurrence of firearm-related violent crime in many of our neighborhoods takes a heavy toll on the nation. In 2017, there were more than 14,000 homicides using a firearm. However, regardless of where you live and how it impacts you, let me assure you that ATF shares the nation's desire to combat gun violence. It is our job, and it is what we do every day.

ATF's mission is to protect communities from violent criminals, criminal organizations, the illegal use and trafficking of firearms, the illegal use and storage of explosives, and acts of arson and bombings. We do this work through our partnerships with our state and local law enforcement partners and other federal law enforcement agencies.

I often say it's our goal that there be no better partner than ATF. That is why a major key to ATF's impact on enhancing public safety is the work we do every day with state and local law enforcement agencies. We seek to achieve this goal through hard work in the trenches and through the unique expertise we provide. The resources we provide to our partners include the National Integrated Ballistic Information Network (NIBIN) and firearms tracing – the two federal resources the Major City Chiefs Association has identified as far and away as the most valuable federal resources they use in their fight against firearms violence.

ATF is a small agency with a big mission. Today I would like to provide you with some examples of what we do with the resources you give us; and I hope these examples point to what we can do to have an even bigger impact in combatting violent crime in the future.

For the past several years, we have been assessing how we use the tools we have in order to be ahead of the curve with regard to violent crime. In fact, I would say we have played a significant role in actually changing the nature of criminal investigations, driving change in the way we use technology and thus helping to drive change in the way our local law enforcement partners use technology. Our efforts in these areas have enhanced our ability to reduce gun violence and make our communities safer for generations to come.

An example of our efforts to expand our investigative abilities is the transformation of ATF's National Integrated Ballistic Information Network (NIBIN), which I referenced earlier. When a firearm is discharged it ejects a shell casing, leaving behind unique markings on the casing. NIBIN is the only nationwide network that allows for the capture and comparison of 3D digital ballistic images of spent shell casings, recovered from crime scenes and crime gun test fires, to aid in solving and preventing firearm-related violent crimes. In the past, the technology existed primarily in labs to generate evidence for judicial proceedings. But our efforts have directly caused NIBIN to become an investigative leads generator – often linking crimes previously thought to be unrelated.

Since 2016, ATF has provided these image “matching” services at one centralized location in Huntsville, AL, called the National Correlation and Training Center (NNCTC). Correlation is the process of comparing images in the NIBIN system and is cost-prohibitive for many police departments nationwide. At the local level, the correlation work is often what becomes backlogged, sometimes taking a year or more to complete. The Center provides consistent and timely correlation services linking shell casings recovered at crime scenes and crime guns locally, regionally, and nationally. Currently, ATF conducts correlation reviews for more than 250 law enforcement agencies, with results within 48 hours or less. We plan to continue to expand this essential service and our goal would be to offer it to all NIBIN participants.

The success of NIBIN is illustrated by a case recently adjudicated in Detroit. In January 2017, a non-fatal shooting occurred at a Detroit gas station. Months later, in April 2017, there was another shooting – this one fatal – at a different gas station. By collecting shell casings at both scenes, and using surveillance footage from the first non-fatal shooting, investigators were able to link both cases to a single suspect, who was arrested and successfully prosecuted. In April 2018, the court sentenced the murderer to life in prison. The use of NIBIN and the National Correlation Center as a leads generator linking incidences will increase our ability to replicate this kind of success story throughout the country. I should mention that last year, through the assistance of the Department of Justice, the Detroit Police Department acquired a NIBIN machine and Detroit is now fully integrated into the National Correlation Center.

Because we have developed a protocol requiring ballistics data entry within two business days from retrieval, we are able to secure leads in as close to real time as possible. This allows us to help take illegal guns off the streets and identify the actual trigger-pullers in a more efficient and timely manner. In fact, a study conducted by Rutgers University regarding the use of NIBIN in New Jersey found that when two shootings are matched through NIBIN, there is a 50 percent chance that the firearm is going to be used in another shooting in the next 90 days. Our protocols are designed to identify and arrest these violent criminals as soon as possible to prevent them from engaging in more violence.

As these NIBIN machines and our correlation capabilities are implemented across the country, ATF will be able to integrate data from localities throughout the network, allowing our experts in Huntsville to generate an even higher volume of actionable, investigative leads. Violent crime knows no boundaries, so our work at the national level supporting local law enforcement is a key part of connecting the dots across jurisdictional boundaries. NIBIN is also the cornerstone of

another way we continue to transform criminal investigations – through our Crime Gun Intelligence Centers (CGICs).

Located in each ATF field division, CGICs are collaborative efforts that use cutting-edge technology and a dedicated investigative team to identify shooters and their source of crime guns. Our CGIC “best practices” have revolutionized the way criminal investigations are conducted – bringing NIBIN and our firearms tracing capabilities into a “one stop” shop. This allows us the ability to direct our intelligence to go after the trigger-pullers in an even more efficient and effective way than ever before.

Let me provide a real-life example from New York as to how we use crime gun intelligence. In 2009, an enforcer in a violent drug-trafficking organization, shot and killed a mother of two children. In 2010, another member of the organization was shot and killed because they feared he would cooperate with law enforcement. NIBIN linked the two murders to the same gun, and our application of crime gun intelligence, now generated in all CGICs, assisted in identifying and arresting the shooter, who in 2017 was sentenced to life in prison plus 10 years. Without NIBIN technology and crime gun intelligence, the trigger-puller would likely still be on the street, continuing to threaten public safety.

Building on the effectiveness of our CGICs, ATF established a Crime Gun Strike Force in Chicago, and is adding Strike Forces in Memphis, Saint Louis, and Houston. These Strike Forces use crime gun intelligence, innovative partnerships and targeted strategies to reduce persistent pockets of firearms violence by disrupting the shooting cycle. These efforts are targeted and smart, including prevention strategies developed through community outreach. The Strike Forces maximize NIBIN leads and leverage crime gun intelligence to identify individuals, groups, and gangs responsible for committing armed robberies, armed carjacking, and shootings.

Strike Forces are another example of the way we have transformed the nature of criminal investigations. It’s more than just Special Agents in the field. Special Agents work together with our law enforcement partners and prosecutors and are supported by ATF Industry Operations Investigators, personnel at the ATF National Tracing Center who track down the disposition of crime guns to further an investigation, and by Intelligence Research Specialists, forensic scientists, data analysts and other personnel who complete the team.

Another area of note is our effort to address the problem of Federal Firearms Licensee (FFL) burglaries. There has been an alarming increase in FFL burglaries and the number of firearms stolen from FFL, from 436 in 2015 to 577 in 2017, with a decrease in 2018. Each time firearms are stolen from a licensed dealer, there is a good chance that they will be used in a violent crime unless they are immediately recovered. ATF prioritizes investigations of FFL burglaries by responding to 100% of these reported crimes. We have also partnered with the National Shooting Sports Foundation in “Operation Secure Store”, which promotes best security practices to FFLs to aid in the prevention of these crime gun incidents. Further, our “FFL Alert” system informs FFLs through an automated messaging system when there is a burglary in their area. This allows the FFLs to have a heightened awareness of potential threats in their area. In 2018, there were over 135,000 FFLs, with only 641 field investigators for both inspections and

burglary response. Each FFL burglary we prevent is potentially a violent crime averted, which is why I view these incidents as an ATF priority.

Additionally, while the prevention of firearms trafficking is one of ATF's top priorities, we often rely on charges related to "straw purchasing," that is, falsifying firearms transaction records to acquire firearms for someone else. However, the associated penalties for these offenses do not serve as an adequate deterrence to the offender, nor the prohibited person soliciting the "straw." Straw purchased firearms are crime guns that adversely impact the safety of our communities. Enhanced penalties would serve to minimize the use of this criminal tool in obtaining firearms for the commission of violent offenses.

ATF also has a role in the National Instant Criminal Background Check System (NICS), run by our partners at the Federal Bureau of Investigation (FBI). The Brady law allows three business days for the FBI to determine whether a firearms purchaser is prohibited from possessing a firearm. If no determination is made within the three business days, the FFL may transfer the firearm to the purchaser. Standard denials are NICS checks that are denied within three business days from the date of the initial NICS check; thus, the FFL may not legally transfer the weapon. Delayed denials are those that are denied after the 3 business days, meaning the firearm may have been legally transferred to the purchaser. When the FBI makes a denial determination after three business days, the FBI and ATF jointly assess whether the FFL transferred the firearm to the individual. If the firearm was transferred and the person is confirmed to be prohibited, the FBI refers the case to ATF for retrieval of the firearm. In FY 2017, FBI referred over 4,500 delayed denials to ATF field divisions for investigation. ATF places a high priority on retrieving firearms held by prohibited persons and has established a timeframe of 48 hours for reviewing delayed denials. ATF expends considerable resources on this priority.

Chairman Serrano, Ranking Member Aderholt, and Members of the Subcommittee, I hope I have relayed why I feel that your investment in ATF is money well-spent. We know that in order to fight violent crime, we must be an integrated and resourceful organization, nimble in responding to an ever-changing environment with technological sophistication. ATF personnel know that the safety of the American citizens we serve has no higher priority.

Thank you for your time, and I am happy to answer any questions you may have.

Mr. SERRANO. Thank you, Director.

At this time Director Halvorsen, you have 5 minutes, and try to keep it to 5 minutes and we will include your statement in the record.

Thank you.

Ms. HALVORSEN. Good morning, Chairman Serrano, Ranking Member Aderholt, and members of the subcommittee. My name is Christine Halvorsen and I am the current Acting Assistant Director of the FBI's Criminal Justice Information Services Division, as we heard earlier, otherwise known as CJIS. I am pleased to be here with you today to discuss the FBI's efforts to halt the flow of gun violence facing our communities.

Let me first assure you, the people of the FBI remain committed to doing whatever is necessary to prevent violence which leads to the tragedies within our communities. For the last few months of my 23-year career, I have had the honor to serve alongside the hardworking men and women in the CJIS Division, who every day are committed to protecting our communities from violence. I am extremely honored and humbled to speak on their behalf of the significant efforts we have and continue to make within the FBI to one day end gun violence.

We are leading several initiatives with our law enforcement partners to ensure we are all best equipped and positioned to mitigate and respond to these violent threats. To do this, the FBI is focusing on partnerships, sharing and evaluating intelligence, conducting continuous process improvements, and looking at our policies, procedures, and the development of our people, so we can better assess our posture against the threats while upholding the Constitution of the United States.

For example, in order to improve our daily operations, the FBI has increased staff levels at the National Threat Operation Center, formerly known to you all as PAL, and that is thanks to the Committee's support. It has refined its organizational structure and training to support expanded management and appropriate referrals to law enforcement to ensure imminent threats to life and national security events are handled in a timely and appropriate manner.

It is building and strengthening partnerships with 911 call centers, suicide prevention hotlines, fusion centers, and other Federal Government agencies who also receive public tips through their on-line or call centers.

Currently, NTOC operates 24/7 with more than 200 members. The members receive and assess public leads and tips made to FBI field offices via phone or e-tips, and, when necessary, disseminate the actual intelligence to action officers. In calendar year 2018 alone, NTOC personnel answered more than 655,000 calls and 755,000 e-tips.

The NTOC standard operating procedures has also been modified to ensure standardization. Additionally, NTOC members are provided threat briefings, threat-to-life, and guidance on school shooting training, reiterating its responsibility to escalate threats to life complaints and ensuring critical information is being relayed clearly, efficiently, and timely to the appropriate action officer.

A number of important IT changes have also taken effect at CJIS and they have been implemented to streamline operations, add critical reporting, and create call auditing features.

CJIS is also responsible, as you said earlier, for the NICS system, the National Instant Criminal Background check system. NICS is a computerized system which aids in determining if a person's criminal history disqualifies them from possessing or receiving firearms.

I would like to level set the committee on how the FBI processes NICS transactions. When a requesting business initiates a NICS transaction, a name and date of birth check is conducted against three databases for possible matches. For all FBI NICS transactions where the database checks are negative, the NICS transaction is proceeded within seconds, sometimes minutes, and it is purged from the system within 24 hours. For NICS transactions processed by the FBI where potentially prohibiting records are returned, the FBI has to initiate a manual review to determine if the record demonstrates a prohibition to the firearm possession.

I want to take a second to talk about the detailed manual review process, so you all can live a day in the life of a NICS operator. Each manual review is labor intensive, as a reviewer only has limited information, as well as must be knowledgeable of the varying state-to-state prohibitions for firearms possession. At the conclusion of the manual review, the outcome is noted as either a proceed, deny, or delay.

In most cases, a delay is issued if the FBI lacks the appropriate information necessary to make a determination. To obtain this information, the FBI makes requests of their law enforcement partners to provide the information as soon as possible. The FBI maintains the transaction as delayed until they receive the information necessary to make the determination or, if the information is not received, it is purged from the NICS system within 88 days.

Since 2010, NICS has experienced substantial increases in the volume of NICS transactions. For example, for Black Friday of 2018, they experienced the highest volume for the highest number of days in the history of NICS. In that one day alone, NICS processed 182,000 transactions.

To help better equip and position our law enforcement partners, the FBI continues to provide basic active-shooter training and response training to sworn law enforcement officers within the United States, and continues to collect active-shooter data. From fiscal year 2015 to 2019, the FBI has trained approximately 58,000 law enforcement officers.

We have developed and delivered courses designed to assist in the implementation and management of intelligence-led policing, focusing on reduction of crime violence.

In short, today's FBI shares more information with our partners than ever before.

Our partnerships are strong and continually we are assessing where the FBI can do better and making changes wherever possible. We are working shoulder-to-shoulder with our partners at every level of law enforcement to halt the flow of gun violence facing our communities.

We greatly appreciate the support of the Subcommittee in all that we do. Thank you for the opportunity to appear before you today and I am now happy to answer any of your questions.
[The information follows:]



Department of Justice

STATEMENT OF

**CHRISTINE HALVORSEN
ACTING ASSISTANT DIRECTOR
CRIMINAL JUSTICE INFORMATION SERVICES DIVISION
FEDERAL BUREAU OF INVESTIGATION**

BEFORE THE

**SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND
RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES**

FOR A HEARING ENTITLED

GUN VIOLENCE PREVENTION AND ENFORCEMENT

PRESENTED

March 13, 2019

**Statement for the Record of Christine Halvorsen
Acting Assistant Director, Criminal Justice Information Services Division
Federal Bureau of Investigation
March 13, 2019**

Good morning, Chairman Serrano, Ranking Member Aderholt, and members of the subcommittee. I am pleased to be with you this morning to discuss the Federal Bureau of Investigation's (FBI) efforts to stem the flow of gun violence facing our communities.

Perhaps some of the most troubling threats currently facing law enforcement are mass casualty events, including attacks within, and violent threats against, our schools. I cannot fathom the agony, horror, and anger of the parents of these young people robbed of their futures. We remain committed to doing whatever is necessary to prevent such tragedies and are leading several initiatives aimed at providing our law enforcement partners with the tools they need to effectively respond to ongoing threats but, more importantly, to identify and mitigate threats before they occur.

National Instant Criminal Background Check System

Chief among these initiatives remains the National Instant Criminal Background Check System (NICS). NICS is a computerized system designed to aid in determining if a person is disqualified from possessing or receiving firearms. In addition to state law and state firearm prohibitions that vary greatly across the nation, there are 10 federal firearm prohibitions. When a requesting business that is designated as a Federal Firearms Licensee (FFL) initiates a NICS transaction, a name check is conducted to search three national databases for possible matches. These databases are the National Crime Information Center (NCIC), which contains information on wanted persons, protection orders, and other persons identified as relevant to the NICS searches; the Interstate Identification Index (III), which accesses criminal history records; and the NICS Indices, formerly known as the NICS Index, which contains information on prohibited persons as defined in the Gun Control Act of 1968, as amended. The NICS Indices include individuals who have been determined to be prohibited from possessing or receiving a firearm when disqualifying information may not be available through the NCIC or III databases, such as those that have been dishonorably discharged from the military.

Nearly 70 percent of NICS transactions handled by the FBI result in no descriptive matches or hits to the potential transferee against information contained in the three national databases. In these instances, the FFL is advised to proceed with the transfer. If, however, there are any potentially prohibiting records returned, the FBI must undertake a manual review to determine if the record demonstrates a prohibition to firearms possession. There are three possible outcomes from this review: proceed (i.e., the record does not establish a prohibition and the transaction can proceed), deny (i.e., the record demonstrates a firearms prohibition), or delay. A delay response indicates the information supplied by the prospective firearm transferee has matched a record searched by the NICS and requires additional research before a final determination can be made. Following a delay decision, if the transaction is not resolved within the allowed three-business-day time frame, it is at the discretion of the FFL whether to transfer the firearm.

Notwithstanding, the FBI Criminal Justice Information Services (CJIS) Division NICS Program continues to work on the case in an effort to resolve it. When additional information is required on a matching record but cannot be found, the transaction remains open until either the information is provided or 88 days have passed. If prohibiting information is provided following the passage of the three-business-day time frame, the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) is notified for retrieval of the firearm. If 88 days pass, then the transaction is purged from the NICS, as required by federal regulation 28 C.F.R. § 25.9(b)(ii).

Since 2010, the NICS has experienced substantial increases in the volume of background checks. This past Black Friday was among the highest volume days in the NICS history. In that one day, the NICS processed over 182,000 transactions. In calendar year (CY) 2018, the NICS processed 26.2 million transactions with only CY 2016 exceeding that volume with 27.5 million transactions.

Despite the increased demands, NICS staff provides exceptional customer service around-the-clock to firearms dealers across the country, while striving to achieve an “immediate determination” rate of 90 percent to the firearms dealer that permits the dealer to immediately transfer the firearm.

National Threat Operations Center

Since 2012, the National Threat Operations Center (NTOC), (formerly known as the Public Access Line), has received more than two million calls that have resulted in thousands of actionable tips and leads for special agents and intelligence analysts. The NTOC is part of the Bureau’s Criminal Justice Information Services (CJIS) Division in Clarksburg, West Virginia.

Whether it’s a tip on a missing child, a bomb threat, or financial fraud, the access line is responsible for receiving and vetting information from the public, then disseminating it to the field. In addition to the Boston Marathon bombing in 2013, the unit has been essential in other major events—like the mass shootings in San Bernardino, California, in 2015 and at the Pulse Nightclub in Orlando, Florida, in 2016. For major cases such as these, the FBI uses a dedicated tip line, “1-800-CALL-FBI,” as a primary means to collect nationwide leads and tips.

Prior to 2012, field offices handled their own calls, which placed a heavy burden on Bureau resources. The access line was born out of the necessity to streamline investigations by centralizing how public information is gathered. Today, the unit vets every tip and complaint that is made to FBI field offices. And it doesn’t stop at a phone call. Threat Intake Examiners also process online tips that are captured through the FBI’s web portal, tips.fbi.gov.

In CY 2018, the NTOC’s personnel answered more than 655,000 calls and processed in excess of 755,000 online tips. Their efforts have saved countless hours of investigative work for FBI field offices.

Currently, the unit has more than 200 members on its staff fielding public leads and tips 24 hours a day, seven days a week. Examiners are not only trained to gather integral information to aid in

potential investigations, they're also taught essential listening and communication skills. This level of training is especially important during times when public assistance is needed the most. In order to improve daily operations, the FBI has increased the total staff in the NTOC by 50 professional and 12 supervisory positions. The NTOC's organizational structure continues to evolve to support expanded functions such as call intake, information analysis, quality management, and appropriate referrals to law enforcement agencies to ensure decisions regarding imminent threat-to-life and terroristic or national security events are handled appropriately.

A number of important IT changes have also been implemented to streamline operations, add critical reporting, create call auditing features, and more. Specifically, the NTOC's intake system was updated to include a button for the examiner to select for immediate supervisory review to help better assess threats and allegations of criminal violations.

The NTOC's Standard Operating Procedure (SOP) has also been modified to ensure standardization of references and resources. The comprehensive electronic SOP receives continuous assessment and revisions by a standalone SOP team. Additionally, the NTOC's employees were provided *Threat to Life* and *Guidance on School Shooting* training, reiterating the NTOC's responsibility to escalate threats to life and ensuring critical information is being relayed clearly, efficiently, and timely.

Training

The FBI continues to provide basic active shooter response training, known as ALERRT, to sworn law enforcement officers within the United States and to foreign partners abroad. This 16-hour course provides law enforcement officers with standard tactical training on how best to isolate, distract, and neutralize an active shooter. In response to threats against schools, the FBI is prioritizing ALERRT training for school resource officers. The FBI also continues to collect active shooter data and will soon publish a biennial report of active shooter incidents that will cover the 2016-2017 time frame.

In response to tragic events like the October 2017 mass shooting in Las Vegas, the FBI is developing the Escape public awareness campaign, which will focus on public awareness messages emphasizing the importance of quick action to escape the scene of an active, violent attack. It is the FBI's hope that these messages will inspire quick action by potential victims that will reduce casualties.

The FBI is also engaging more proactively with its law enforcement partners on school threats. We are compiling and sharing data related to threats of violent attacks against schools, while discussing how best to accurately collect this data in a standard way across the country. Our behavioral analysis specialists at Headquarters and in each field office are actively engaged with field office personnel and local law enforcement who are working school threats, as well as with community members who require greater education on the threat. Recently, our Behavioral Threat Assessment Center (BTAC) provided FBI field coordinators with numerous resources to utilize in outreach efforts, including *The School Shooter: A Quick Reference Guide*. In addition to providing key questions and descriptive statistics and motives, this one-page guide, along with

a corresponding training presentation for use in outreach efforts, identifies concerning behaviors and potential warning signs of a shooter that should prompt further inquiry by appropriate community members or law enforcement. Furthermore, the FBI's BTAC has embarked on an aggressive field-wide threat assessment enhancement effort that will include the provision of advanced training for field office personnel on threat assessment and threat management.

The FBI also intends to address school shootings through the development of a documentary video, *Echoes of Columbine*, which explores the details of past shooting events. This video will examine factors that led to the perpetrator's attack, behaviors and indicators of a potential shooter, and preventive measures that should be considered by schools and law enforcement. This video will be the third in a series created by the FBI to build community awareness of the pathways to violent behavior.

For its part, the Office of Partner Engagement (OPE) implements initiatives and strategies that support engagement, communication, coordination, and cooperation efforts with law enforcement, intelligence, public and private agencies, and partners in a continuous effort to enhance the FBI's capabilities in the domestic information-sharing architecture. The OPE accomplishes this mission by establishing and maintaining methods and practices to enhance engagement, coordination, and information sharing with the U.S. Intelligence Community; intelligence commander groups; federal, state, local, and tribal law enforcement; and public and private organizations and working groups.

Violent Crime Trends

To better understand violent crime trends, the FBI is working closely with several national-level law enforcement associations on programs and initiatives aimed at providing greater awareness and collaboration on priority threats. The FBI is collecting homicide and shooting data for inclusion in monthly and annual reports that are disseminated to participating departments and agencies. These reports provide real-time awareness of relevant data, which inform FBI and national-level strategies to combat violent crime. We also have created the Law Enforcement Watch, which is an FBI product that captures relevant news articles pertaining to executive-level law enforcement issues, school violence, police killed or injured in action, and use of force. This product is produced daily and is distributed broadly to our law enforcement partners for their situational awareness.

In coordination with the Major Cities Chiefs Association (MCCA), the FBI is developing a process to aid police departments in identifying and prioritizing criminal threats within their areas of responsibility, with the ability to then compare their findings with those of departments across other jurisdictions. In response to a request from the MCCA, the FBI developed and delivers the Introduction to Intelligence Theory and Application for Law Enforcement Supervisors course, which is designed to assist law enforcement supervisors who oversee intelligence units to implement and manage intelligence-led policing. The FBI and Major Cities Chiefs also have engaged in an in-depth study to identify national-level best practices to reduce the rise in violent crime across some of America's most violent cities. Additionally, the FBI is in its third consecutive year of conducting studies identifying commonalities among assailants who killed or attacked law enforcement officers. We believe that this research will provide law

enforcement partners with information on assailants' mindset, which may help in identifying additional officer-safety measures.

Conclusion

In short, today's FBI shares more information with our partners than ever before. Our partnerships are strong, and we are continually assessing where the FBI can do better and making changes wherever possible. We are providing training, identifying commonalities, and working shoulder to shoulder with our partners at every level of law enforcement to mitigate the threat. We look forward to continuing this important work and appreciate the support of this committee. Thank you for the opportunity to appear before you today. I am happy to answer any questions.

Mr. SERRANO. Thank you. Thank you both for your testimony.

INSPECTIONS OF FEDERAL FIREARMS LICENSES (FFLS)

Mr. Brandon, ATF currently inspects approximately eight percent of all Federal Firearms Licensees, or FFLs, each year. What funding and personnel would you need to increase that to 20 percent? And does ATF have a target for what percentage should be inspected each year? If not, what percentage would you recommend as a matter of best practice?

And let me tell you that I have been in Congress for quite a long time and on this committee for quite a long time, it is very rare to have the chairman or the ranking member, or anyone say, how much money do you need? It is usually you are asking too much. So, if you can tell us.

Mr. BRANDON. Mr. Chairman, thank you for the question and, hey, we will take whatever you give us, you know. [Laughter.]

But as far as our industry operation investigators, we have about say 850, but really about 684 are actually doing the inspections. Each one, they work their tails off; they do about 40 to 50 inspections per year. And one of the things with these inspections is that in the firearms industry about 50 percent of the FFLs, the Federal Firearms Licensees, are new within the last 5 years. When someone establishes a business, we want them to be successful. The IOIs personally meet with them, and go over the regulations and the administrative documents that they need. So that eats up a lot of the time. We can always do more with, with IOIs.

And, to answer your question, IOIs, if we had a few hundred more, could we do more? Sure. We try to maximize with whatever resources we are allocated.

We are using a new type of way that is like a CompStat with our inspections, to go after the people that are worthy of inspection, and we are having oversight at the headquarters level. Each field division will give us their plan for the year, their domain assessment, and we will have headquarters review it to make sure they are inspecting the proper targets. I have heard it referred to as, you know, the troubled dealers that we don't have attention on. I have been in my position 7 and a half years now, and we have improved and we continue to improve, as we should, as any organization should with continuous process improvement.

But to answer your question—I would say we would need a few hundred more industry operations investigators to accomplish the percentage you recommend.

Mr. SERRANO. A couple of hundred would bring you to 20 percent, you said?

Mr. BRANDON. As best as I can answer right now, sir, yes, I would be comfortable in saying that that would help us. We would obviously have more progress, but I believe that would be accurate.

Mr. SERRANO. Last summer, the New York Times did an investigation of ATF's inspections of gun dealers that revealed that supervisors downgraded recommendations to revoke these gun dealers' licenses. How many of these recommendations to revoke licenses get downgraded each year?

Mr. BRANDON. Well, sir, I will get back to the committee with the specific numbers, but I will explain the process, and it was a proc-

ess to be fair, that you didn't have inconsistencies applied around the country depending on who the DIO, the Director of Industry Operations was; there is one for each of the 25 field divisions. So it comes up and is reviewed, we address the issue and there is national oversight to ensure there is consistency and fairness applied to the process.

Mr. SERRANO. Let me ask you another question. Several years ago, Congress prohibited ATF from requiring the Federal Firearms Licensees conduct physical inventories of their premises. To what extent does this restriction impede ATF's ability to inspect the FFLs?

Mr. BRANDON. Well, sir, we follow the laws that you pass and the funds you give us to do that, so we operate within the confines of that.

I will say, there is a program where the FFLs have been receptive, and when they are victims of a burglary or a robbery. And we respond as an integrated team of ATF special agents and ATF industry operations investigators, and along with the local police. And a key component is that is helping the FFL determine the inventory, the firearms that were being stolen, so that they could be entered into NCIC that the FBI controls. And we know from those burglaries and robberies that those are no longer lawful commerce, they are crime guns and they are going to be used to shoot people, and most likely the people that are going to come up against them are the brave men and women on patrol in uniform.

Mr. SERRANO. Thank you.

NICS

Ms. Halvorsen, I understand NICS relies on three main databases; the NICS crime database, the Interstate Identification Index System, and the NICS index, which includes records not in the other two databases, particularly from states and other agencies to include mental health records. An important point is that states provide their information voluntarily.

Would you agree that it is critical to have timely and complete information from the states to ensure NICS has what it needs to make accurate and timely assessments of gun purchaser's eligibility?

Ms. HALVORSEN. So it sounds like you know our process very, very well. So, yes, the firearms background checks—

Mr. SERRANO. Somebody does on staff, for sure.

Ms. HALVORSEN. Yes, there you go. [Laughter.]

So, as I had said in my opening statement, the firearms background checks are only as good as the information we have at the time that we have it. So the operator—we call them legal instrument examiners—when they review the NICS background check request that comes in, they are going off the information they have at that point in time and then request further information if we need it.

So, the more timely the information, the quicker we can make a decision and move forward with the process.

Mr. SERRANO. And what records do we need to get state or federal partners to improve submission of relevant health and other records?

Ms. HALVORSEN. So regular—so I am just confused—

Mr. SERRANO. What records do we need to get state or federal partners to prove submission of relevant health and other records?

Ms. HALVORSEN. So, the Fix NICS Act was a big help to us with getting the dispositions into the system and working through that, and having the grants that were funded by DOJ to help the states get through that has been helpful; we are still working through that process to get the relevant records that we need into the system.

Mr. SERRANO. Let me just ask a question that I don't have here. What would say is the morale of the folks that work in your agencies? Because a lot of times we hear that people feel that their hands are tied on some of the things they want to do. What is the sense? If I, you know, was to talk to employees at ATF, for instance, would I find people who say we could be doing more, but we are not allowed or we can't do more? What would I find?

MORALE OF AGENTS IN THE FIELD

Mr. BRANDON. Sir, I believe morale in the field, the men and women that are running and gunning, going after the trigger pullers and the traffickers providing those trigger pullers with the gun, they do it with passion. It is not who they became, it is who they have always been. It is in their DNA to go after and do this type of work, and I am sure it is the same in the FBI and all the other law enforcement organizations.

But I would not be doing my job up here of the continual compression of our budget where the costs have gone up; even though our budget has gone up, the costs have gone up higher. And to be candid with you, I have been an agent for ATF 30 years, and the cost of conducting criminal investigations has gone up. Everybody has a cell phone in their life, so it costs for digital media exploitation, social media warrants and so forth, and I know we are not alone. The one thing that they would maybe feel is that we are underappreciated for the job that these brave men and women do. We are the smallest component in DOJ and law enforcement; FBI, DEA, US Marshals, and then ATF.

But, regardless of that, I attend every academy class mostly, and I ask them why they come on the job and they come from other agencies, even from the FBI, you know, and then the—

Ms. HALVORSEN. Hey. [Laughter.]

Mr. BRANDON. We love stealing people, the Secret Service, everybody. And—

Mr. SERRANO. You would take people from the FBI?

Mr. BRANDON. Oh, we have classes, yeah. But the reason I say that—and we have a great relationship with the FBI—is the mission. It is they want to go after—to your point in the Bronx—they want to go after the people that are hurting people. These are good Americans that are saying, hey, let us go after the trigger pullers and the traffickers. I know from personal experience, there is nothing like locking up a killer.

Mr. SERRANO. Thank you.

Mr. Aderholt.

Mr. ADERHOLT. Thank you, Mr. Chairman.

FIX NICS ACT

As you know, last year when the President signed the Fix NICS Act, which requires all federal agencies to certify twice a year that they are uploading criminal record information to NICS, and requiring the Attorney General, in coordination with the states, to establish implementation plans to ensure maximum coordination of reporting records.

Director Halvorsen, let me direct this question to you. Has Fix NICS—and you alluded to it, but I want to get a little bit more of a definite answer on this—has Fix NICS made a difference in states and federal agencies that submit these relevant records to NICS?

Ms. HALVORSEN. So the Fix NICS Act has been very relevant to the work that NICS is doing every single day. All the submissions are due March 25th of 2019 by all the agencies that were required to submit one for the Fix NICS Act. And we have issued reports in December 2018 and February 2019 and, out of the 56 agencies that were required, 18 have yet to submit. But we know that they are on target for the March date.

We have actually created a whole outreach group as well with our local and state partners that actually are working on the grants that DOJ has provided to them to help them get through this. And, again, we are holding their hand through that process. They are all in different phases, all in different stages of how to do it, but we are working through that and technology fixes on how we can better assist them to get them in. Overall it has been tremendous. Including for the appeal process. We are under the 60 day deadline every single week on the appeal process because we are getting the dispositions in and have been able to, you know, adjust them as quickly as we possibly can because of the dispositions coming in.

Mr. ADERHOLT. What would be the impact on the FBI if all states require firearm background checks on private sells across the U.S.?

Ms. HALVORSEN. Obviously, the workload would tremendously increase, but we don't know what that would be, because right now private sales aren't tracked. So we don't know what the volume increase would actually be to NICS, but if that was implemented, obviously our workload would increase.

NICS

Mr. ADERHOLT. To the extent to which states work on a collaborative effort with the FBI to conduct NICS checks varies depending on the willingness of the state governments to act as a liaison for NICS, Federal Firearms Licensees will contact either the FBI or the designated state point of contact to initiate the background checks on individual's possessing or receiving the firearms.

So, my next question, are states and federal agencies mandated to contribute records to NICS?

Ms. HALVORSEN. At this time, they are not mandated—it is voluntary.

Mr. ADERHOLT. What is the difference between a full-time state point of contact and a non-point-of-contact state?

Ms. HALVORSEN. So, when the Brady Handgun Violence Prevention Act of 1983 was implemented, states could actually choose one of three options. They could become a full POC state, a non-POC state, or a partial POC state.

In states designated as a full POC state, FFLs utilize the POC to submit their NICS check. So all that is done by the states. In states designated as non-POC, NICS does all the checks. And then we have other states that we do some handgun checks or we do long gun checks, and those are the partial POC states.

Mr. ADERHOLT. OK.

Ms. HALVORSEN. So we kind of have a mix of it all.

Mr. ADERHOLT. Has NICS volume increased say over the last 5 five years?

Ms. HALVORSEN. Yes. In 2018, it was \$26.1 million.

Mr. ADERHOLT. What is the difference in volume that the FBI processes versus state POCs?

NICS VOLUME

Ms. HALVORSEN. We actually don't have that number, so it would be great to get back to the committee——

Mr. ADERHOLT. OK.

[The information follows:]

As reported in the National Instant Criminal Background Check System's (NICS) 2018 Operations Report, the FBI Criminal Justice Information Services Division's NICS Section processed 8,235,342 background checks in 2018, and state users processed 17,946,594 background checks. Of the state initiated background checks, 5,293,391 were for the potential transfer of a firearm and 12,653,203 were for firearm-related permits.

Please note, states may have procedures or regulations upon which they deny a background check before the NICS is queried; therefore, the volume provided may not be representative of the actual total.

Ms. HALVORSEN [continuing]. And work with the states to provide that number to you at a later date.

Mr. ADERHOLT. OK. If you get back with that, that would be great.

Can a private seller utilize NICS today?

Ms. HALVORSEN. They can, if they go through an FFL, they are able to go to an FFL and submit the private sale through the FFL.

RESTRICTING SALES OF FIREARMS/TERRORIST WATCH LIST

Mr. ADERHOLT. This committee has considered on many occasions an amendment aimed at the restricting sales of firearms to persons on the so-called terrorist watch list; does that amendment raise any concerns with you?

Ms. HALVORSEN. I can understand why you ask that question, because I have been in the Counterterrorism Division since 9/11 and I was New York when 9/11 happened, so I completely understand the question. But when we look at that, we take each one of those on a case-by-case to make sure that there are legal prohibitions. Just because they are on the terrorist watch list, right, there is a due process that in order. So we refer those over to the individuals and we work in that 3-day window to try to determine if there are prohibitions for each individual that does hit on the watch list.

Mr. ADERHOLT. Because clearly it is easy to get on the watch list, because something—when I say easy, it is very common for people who may not should be on the watch list to in some way get on the watch list because they may have been somewhere in various other things.

Ms. HALVORSEN. Yes.

Mr. ADERHOLT. If enacted or something of this nature were enacted, how would the FBI square the requirements of that amendment with the constitutional guarantee of due process of law?

Ms. HALVORSEN. So I think we have to wait until the legislation comes out and work through it with you after it comes out on implementing procedures and processes behind it, after we see the language.

NICS

Mr. ADERHOLT. And this is my last question here. Just as NICS needs to have the appropriate disqualifying records, it also is important for NICS not to contain inaccurate records or records that are prohibiting. What impact on the system do extraneous or inaccurate records have?

IMPACT OF EXTRANEEOUS OR INACCURATE RECORDS

Extraneous or inaccurate records generally do not impact the NICS functionality, from a system or technical standpoint. The FBI relies upon the collaboration and cooperation of agencies nationwide to submit accurate information on prohibited individuals.

In March 2018, the U.S. Attorney General sent a letter to the FBI, state governors, and state attorneys general encouraging improvement in disposition record reporting. The FBI's goal is to make state and federal prohibiting records available at the national level. Additionally, the Fix NICS Act of 2017 has reinvigorated criminal history discussions across the country.

The FBI has long-standing relationships with record-owning agencies, and has collaborated with and advocated for record sharing. The FBI has numerous proactive measures in place to support agencies in the identification of lacking or missing information in the applicable databases searched by the NICS. The list below outlines a few specific resources the FBI has made available to assist the states in addressing missing or incomplete records in the applicable databases searched by the NICS.

- The FBI conducts educational outreach to increase database records and final dispositions, as well as the identification of other needed pieces of information to support the immediate identification of prohibiting information, such as relationship to victim, statute, and subsection of the conviction;
- The FBI provides annual criminal history dashboards to agency contacts. Each dashboard provides information about the number of arrests on file in the FBI's Next Generation Identification (NGI) System, as well as the number of arrests with and without final disposition data;
- The FBI requests that agencies perform self-audits to identify gaps in providing arrests and subsequent disposition information to the NGI System;
- The FBI provides reports to requesting agencies containing arrests with missing dispositions that are older than a year. This supports a continuous self-auditing tool;
- The FBI has dedicated staff performing research to assist in the location of missing dispositions, which the FBI then uses to update criminal history records in the NGI system;
- The FBI has dedicated liaison teams who specialize with the applicable databases searched by the NICS. They provide regular and ongoing support to record-owning agencies and contributors with the identification, submission, and maintenance of data and records;
- The FBI created a Disposition Task Force in 2009 and continues through today to collectively pursue methods to enhance disposition reporting.

The FBI CJIS Division conducts system audits on a triennial basis. Among other audits, the CJIS Division is responsible for National Crime Information Center

(NCIC) and Interstate Identification Index (III) audits. The audits are conducted with state and federal CJIS Systems Agencies (CSA) and include reviews of local agency/field components within their applicable jurisdiction or span of control. The audits assess the performance of the CSA in administering NCIC and III systems access and services.

Ms. HALVORSEN. So we would have to go back and do a study. We frequently audit the system to make sure that we have accurate records, and we go back to the different federal agencies and law enforcement partners to update the records frequently. But if you need a full impact, I would have to get back to you on that.

Mr. ADERHOLT. OK. Yeah, just let us know what impact that would have—

Ms. HALVORSEN. Absolutely.

Mr. ADERHOLT [continuing]. It would be very helpful.

So, all right, I will yield back.

Mr. SERRANO. Thank you, Mr. Aderholt.

So we will start our members round with Ms. Meng. And please keep in mind, try to keep it to 5 minutes, and remember that this is simply a love tap.

Ms. MENG. Thank you, Mr. Chairman and Mr. Ranking Member, for holding this important hearing today, and to both our witnesses for being here and your work for our country.

DOMESTIC VIOLENCE AND FIREARM POSSESSION

I wanted to ask a question about domestic violence and firearms, which, as you know, can be a lethal combination. An average of three to four Americans are murdered by intimate partners daily, most of these victims are women, and most of them are murdered by abusers using firearms. Thirty five percent of women in the U.S. who are killed by men are killed by intimate partners using firearms.

Ms. Halvorsen, how many default proceeds to prohibited persons occurred last year and what percentage of them were to domestic abusers?

Ms. HALVORSEN. So it is a good question and a very, very important topic that you are discussing. I don't have the numbers on that. We don't do auto proceeds if there are any hits in the system. So there wouldn't be hits in the system. If there was, they would go into the delay queue, and then in that manner it would be processed.

FIX NICS ACT

Ms. MENG. And I know you also mentioned how the Fix NICS Act has helped, has made a difference; is that also true for the entry of domestic violence records? How has that changed from before and after Fix NICS?

Ms. HALVORSEN. So we continue to work with our partners on getting the domestic violence information put into the systems. Sometimes it is incomplete and inaccurate information we get it. So, it will hit on it, but it might not have the right code that we need. So we will reach out and get those codes into the system that we need in order to make the right determination. And there are also limitations, we have other factors we have to prove in that domestic violence, on the relationship, the violence, based on the stat-

utory requirements right now that are necessary to make that determination.

Ms. MENG. OK. Do you feel like you have the resources you need to ensure that agencies put in place state-by-state implementation plans?

Ms. HALVORSEN. To join in, any more resources are always helpful in the process and adding to that. So, it would be great. But we do handle them, like I said, and case by case basis and we do get through each one.

DOMESTIC VIOLENCE AND FIREARM POSSESSION

Ms. MENG. And, Mr. Brandon, what is the ATF doing to be a resource to local law enforcement agencies to ensure that these adjudicated abusers don't have access to firearms?

Mr. BRANDON. Ma'am, thank you for the question. For instance, if we received a delayed denial from the FBI, meaning that the firearm has transferred after 3 full business days, the Federal Firearms Licensee has that option, and all of a sudden it is determined that the person has a misdemeanor crime of domestic violence, that is a priority to ATF and we pounce on it, you know, because we don't want someone getting hurt by someone that shouldn't have a firearm.

So we are vigilant with that, I get briefed every month on that, and we have our eye on the ball. And we work hand-in-hand with our FBI partners, because they realize that as well. So, if we get that alert, it goes to the division, we move on it.

Ms. MENG. Thank you.

ACTIVE SHOOTER DRILLS

I also wanted to talk about the importance of active shooter drills, which are increasing. I am a mom of two young boys, I am always thinking about their safety, and all our children across the country. A recent analysis by the Washington Post found that during the last school year more than four million students experienced at least one lockdown or drill, including about 200,000 students in kindergarten or preschool. Even in my district, we have local synagogues conducting active shooter and terrorist-prevention training for their congregants.

INTERAGENCY SECURITY COMMITTEE POLICY AND BEST PRACTICES GUIDE

I saw that ATF was part of the working group to craft the 2015 Interagency Security Committee Policy and Best Practices Guide, but this guidance was designed to apply only to buildings and facilities occupied by federal employees. To what extent was ATF's participation in crafting this guidance, and can we work together in researching strategic approaches to preventing this type of violence, specifically in public or private schools, or even in houses of worship?

Mr. BRANDON. Ma'am, thank you for the question. We weren't consulted, but ATF remains at the ready for any expertise we have, and we have a lot of tactical experts. We will work hand-in-hand with our law enforcement partners to protect America.

Ms. HALVORSEN. So, I also am a mother of two young children, so obviously this is a topic that affects me every day. My kids are paranoid, because my husband is also an agent, so they live in a different world sometimes than other children. But we, in the FBI, have held in June 2018, a school security summit where we brought in all our law enforcement partners, as well as in this last fall we also brought in different schools to come in and talk about what the threats are, not even just from a violent crime aspect, from a counter-terrorism aspect and other aspects of threats that are facing them every single day, and walk through that.

And so we are continuing to do that outreach. We continue to work with them, and get them to understand what the current threat environment looks like and how they can operate within that, while still keeping laughter inside the schools.

Ms. MENG. Thank you.

I yield back.

Mr. SERRANO. Thank you. The beauty of being a Member of Congress, you recognize the gentlewoman from New York, where it was pretty chilly this morning, and now we recognize the gentleman from Hawaii, where it was not, I imagine.

Mr. CASE. My apologies for that, Mr. Chair. [Laughter.]

Thank you to both of you. And I want to first of all say thank you to you and all of the great people that serve with you. You know, you have got a tough job here. You are on the front lines of what I believe and many believe is now clearly a public health epidemic, and you are obviously on the front lines of a continued political divide on whether and to what extent to regulate guns.

What I am focused on, I hear, is not so much that policy side, but the appropriations side of this, which is, as the Chair said, do you have the resources you need to do your job.

And I will say up front that a big-picture, you know, high-altitude observation is that the system simply seems to be getting overwhelmed at some times with the not only increasing gun violence, but with increasing demands on the existing laws, much less the new laws, that I and other people propose to increase protections.

FBI RESOURCES

And so the basic question is, is the Federal Government keeping up with the resources, both financial and positions, for you to do your job?

And I use one example, and correct me if I am wrong, but if I understand this correctly, there were somewhere in the range of 6,000 checks that really weren't completed in time in a recent fiscal year; is that correct, is that about right?

Ms. HALVORSEN. So it is not that the checks weren't completed on your question, are you speaking about the gun retrievals that were referred over to ATF?

Mr. CASE. No, I am talking background checks. So within the 3-day period that they did not come back within 3 days.

Ms. HALVORSEN. So it is a very cumbersome process. It is not that the checks weren't completed, it was sometimes we don't get all the information in order to make the determination on the checks. So there is a difference there that—

Mr. CASE. OK. Well, I don't want to get into the semantics. The point is that we have a very tight time frame and that time frame was not within 3 days, and therefore there was a sequence of events that occurred in terms of people being able to acquire the guns, right?

Ms. HALVORSEN. Correct.

Mr. CASE. OK. So that is a lot. And the question is, do you have the resources to—you know, obviously, many of us propose to extend that deadline, because we think it is too tight to start with, but even assuming that deadline, 6,000 not to be completed within that period, that is a logistical issue, because at the right level, I suppose, of funding and positions, you could in fact whittle that 6,000 down significantly.

So I am looking at your budget, I am just looking at the budget that we got, at least the skinny budget, we don't have the detail yet, and I am just looking in the NICS portion and it says here, "Increases by \$4.2 million, 40 positions," and if I calculate that correctly that is an increase of about close to four percent in terms of money and about six percent in positions. That just doesn't seem to me to be a lot of money and positions to increase by, considering the testimony that you have given and all of the other evidence in terms of what seems to be a real problem in implementing the current law, much less, you know, changes in the law, just from a resources perspective. Do you share that perspective?

Ms. HALVORSEN. So, the 40 bodies absolutely help, so we want to thank the committee for funding those bodies, because they absolutely help the staff that was there. In the FBI, we have statisticians that work off of the data. When we know gun sales are increasing, and we have to surge, we end up surging employees from other areas that are critically needed to assist in the gun check process. So when we have those peak times like Black Friday, we have people already trained up who can assist in that.

So the FBI is continuing to surge employees back and forth to assist with the checks that we are doing.

Mr. CASE. What you are describing to me is a good-faith effort to accommodate existing limitations, that is not the question I am asking. The question I am asking is, are you adequately resourced, in your view, or do you believe—I am going down the lines of the Chair's question, which is do you have what you need?

Ms. HALVORSEN. More resources——

FBI RESOURCES CONT'D

Mr. CASE. You have got public safety in your hands and do you have the resources that you need? And I make the point again, I think that the budget requests in this department seems to be pretty skinny for getting the job done, considering the trends and considering your testimony.

So I am just asking you straight out, do you think that this is an adequate budget request?

Ms. HALVORSEN. So I know for the 2020 budget, which we still haven't received yet, that we would be looking to make a budget request enhancement.

Mr. CASE. OK. Well, I am telling you what the budget says, because I have it, and it says four percent money and six percent positions.

Ms. HALVORSEN. That was for fiscal year 2019, correct?

Mr. CASE. No, I think that is the 2020 program enhancement proposal.

Ms. HALVORSEN. OK, we are requesting it. OK, sorry.

Yes, so I think the more resources we have, the better off we would be in having that surge of resources back and forth.

Mr. CASE. It seems that there has been—you know, obviously, in a budget process there is a policy judgment component to it and there is an internal discussion as to what is adequate, and there are cost-benefit analyses and tradeoffs and, you know, all the things that go into a budget.

What has your familiarity been with those discussions? Was there a discussion about whether proposed increases in this department should be limited or enhanced, or maximized or—you know, what is the priority in terms of background checks?

Ms. HALVORSEN. The priority in background checks is trying to get through all the background checks, right, before the 3-day window closes, to minimize the risk that we possibly can, and to actually also allow people who should be possessing weapons, to allow them to possess weapons.

Mr. CASE. I guess I'm not trying to be too hard on you at least, but you are in—

Ms. HALVORSEN. No, it is all right.

Mr. CASE. I just wonder whether this had the priority that it deserved, so that is what I am trying to get to from a budget perspective.

Ms. HALVORSEN. So it absolutely does have the priority, because we wouldn't be surging individuals off of other programs to surge to meet the need when we need to.

Mr. CASE. Well, you wouldn't have to surge them if you had adequate funding to start with. So I don't want to go back to that surge thing, because that is getting taken away from somewhere else.

Ms. HALVORSEN. Correct.

Mr. CASE. Okay. So that is a temporary solution, not a permanent solution.

Ms. HALVORSEN. Correct, absolutely.

APPROPRIATIONS RIDERS

Mr. CASE. OK. Mr. Brandon, you made reference to implementing the law, as is your charge, and I am asking you a little bit about whether we need to change some of that law. And I get to it from appropriations, because in some of these areas you are subject to appropriations riders, you are subject to appropriations riders that have been included in recent years and in, you know, various areas to include restrictions on gun dealer physical inventories, working with other federal agencies, creating searchable databases of records, multiple gun traces, looking for patterns, those are all appropriation riders that are limitations on your funding without actually being laws per se, but they have the effect of law.

Do you believe that we should reverse some of those appropriations riders, would that help you do your job better?

ATF RESOURCES

Mr. BRANDON. Sir, can I get the same question as Christine did about funding? [Laughter.]

Mr. CASE. Yes, you can. I didn't see your funding go up at all in the area of—if you want that question, I will ask you that question, because I'm not sure I saw—

Mr. BRANDON. Sir, I love ATF, I love America, I like guns, I hate gun violence. And, truth be told, our budget for 2020, if it goes and we salute, we will have to let go of—trim 377 positions. So ATF won't be as able to do what it can do today. In 2019, we cut \$40 million to keep status quo. You hear people say trim the fat, then we trimmed into muscle, and now we are trimming into bone.

I can't end my career as an ATF agent who loves America, loves our partnerships, and knows the consequence of ATF not being properly funded. I don't care if you are a Democrat or Republican, I am an American, and I have seen people suffer from gun violence my whole career. So maybe that is the saturation point.

So, thank you for letting me answer your question.

Mr. CASE. I thank you for your incredible candor. That is what I want, you know, that is what we want. We want to know, are you adequately resourced? I look at the fiscal year 2020 budget, saw no increase in your area focused on gun violence, and I wondered the same thing, what is the policy judgment that goes into that?

Mr. BRANDON. And, Sir, if I could tell you, the Deputy Attorney General, he has been phenomenal, former Attorney General Jeff Sessions, when I mentioned the Correlation Center. When our pass-back came back last year, I didn't even get a call it was so bad. If it wasn't for them fighting for us, we would have been crushed.

You see the benefit of this Correlation Center. When those rounds are in the street, we don't know if the person is male, female, white, black, or brown, but we know we have got a trigger puller. And to get the money issue—we have been robbing Peter to pay Paul to deliver on everything, and it is the drip, drip, drip, and now we are cutting into bone.

And so I thank you for letting me do that, and hopefully you can see that I am not trying to be political, I am trying to be honest as, you know, and I am assuming, you know, under oath.

Mr. CASE. Thank you.

Mr. SERRANO. Mr. Cartwright.

Mr. CARTWRIGHT. Thank you, Mr. Chairman. And, Director Brandon, thank you for your candor as well, and thank you for both of you being here today.

CHARLESTON LOOPHOLE (H.R. 1112)

I want to talk about the Charleston Loophole bill that the House just passed, H.R. 1112, which of course is designed to close that loophole by preventing individuals from purchasing firearms from a gun dealer without a background check. The Administration opposed the bill and I am trying to figure out why. We are talking about a law that would simply ensure that people who can't pass

a background checks are not able to purchase a firearm from a licensed gun dealer.

The problem is, as it stands today, there is 3-day waiting period and, after the 3-day waiting period, people who are not supposed to get a gun can pick one up from a gun store if the FBI has not finished the background check, hence the reason for H.R. 1112.

The FBI reports that in 2017 6,004 firearms were potentially sold by gun stores to criminals because of this. So criminals, including violent felons, dangerous fugitives, domestic abusers, people like that, because the FBI had not completed their work in the 3-day time allotted, that was an increase of nearly 2,000 guns from 2016.

So the first question for you, Mr. Brandon, is how would passage of H.R. 1112 impact the ATF's efforts to prevent gun violence?

Mr. BRANDON. So, thank you for the question. Obviously, I am in the executive branch, and the Administration came out with a statement of administrative position that they oppose it. So I will just say that I can tell you what the consequence would be if more time is allowed, say from Christine's folks.

So, obviously, the more time you have, the more time then you have time to make a decision. I think transferring a firearm is an important decision, but the consequence would be that there would be less delayed denials for ATF agents to go out and track down and getting these guns. Then the agents would have more time—and I keep referring to it—going out to capture the people that are shooting people, which is a smaller number of people. We know how to do it with our intelligence-led, risk-based, Crime Gun Intelligence Centers.

So that is the downstream. If there is more time, there is less delayed denials, and that is just making a logical inference of, the more time you have, the more time you have to make a better decision.

Mr. CARTWRIGHT. Thank you, sir. I thought so too.

OK. So, when these loopholes are default proceed transactions, in other words where the 3 days goes by and the background check isn't done and the person gets the gun, do you have to go out and collect these firearms or conduct an investigation if the purchaser is later denied by the NICS?

DELAYED DENIALS

Mr. BRANDON. Yes, sir, there is a process. We work hand-in-hand and we act on those delayed denials within 48 hours, and then they will get—if they meet these parameters for prosecution for each judicial district, it will be referred to the ATF field office.

First, they will try to just reach out to the person to see if they will bring the firearm back to the Federal Firearms Licensee, or transfer it to a non-prohibited third party that won't reside with the person. If they don't, then it is, you know, going out to retrieve the firearm from the person that is prohibited from possessing it.

Mr. CARTWRIGHT. So, Director Brandon, this is not a pop quiz and, if you don't have a ballpark off the top of your head, I won't blame you, but do you have any statistics regarding how successful ATF is at recovering firearms in delayed denial cases?

Mr. BRANDON. Sir, yeah, I won't guess at numbers, but I will say that there was an OIG review a few years ago that said, when we get the information from the FBI, it is 99 percent that the system is working accurately. And myself and my team, we put a focus on these delayed denials and, God forbid, like a Charleston, nobody wants that to happen. The FBI and ATF, no organization wants to say, hey, the person got the gun, they shouldn't have had the gun.

And I just want to comment, we have great relationships with the firearms industry. A lot of the big box stores, even though they say, yeah, we can do it, they make it their policy not to transfer it until they hear from the FBI. So that is something that we try to do within our authority just to share things with them and, to be honest, I guess the margin of profit on a firearm is less than the accessories that would be sold with it, but it is not worth their headache to have a public relations nightmare.

Mr. CARTWRIGHT. Understood. Thank you for that.

DANGER OF RETRIEVING FIREARMS

So I am delving into your world right now and I am kind of imagining the picture, and I want to get confirmation from you, if I can. Isn't that potentially dangerous where you have to go out and retrieve a firearm that somebody that really should not have got hold of a firearm in the first place has? You are talking about dangerous people and retrieving their guns from them that they never should have got; isn't that potentially dangerous?

Mr. BRANDON. Sure, sir, and it is analogous to the man and woman in uniform on patrol, they pull over someone, they don't know what they are going to be dealing with. Even though we have the advantage of doing some work-up, you never know if it is high risk, low risk. It is unknown risk. So it is dangerous, inherently dangerous, retrieving a firearm from someone.

CHARLESTON LOOPHOLE (H.R. 1112)

Mr. CARTWRIGHT. That is what I thought. So wouldn't H.R. 1112 keep your agency from having to go through that exercise, going out to pick up guns from dangerous criminals that can't legally have them?

Mr. BRANDON. Well, sir, like I mentioned, the downstream effect where the people that wouldn't have to be doing that, would be going out after the trigger pullers. So it would be probably be even more dangerous, because we know these people are actually pulling the trigger and shooting people.

But to your point, it would have less touch points with the public if downstream there are less delayed denials.

Mr. CARTWRIGHT. So wouldn't this bill help your agency devote its very scarce resources to other important investigations and activities?

Mr. BRANDON. Sir, whatever laws you pass, we will follow. And then being, again, in the executive branch, you know, the chain of command goes up to the White House and we follow our marching orders, but we will always act within the appropriations and laws that you pass.

Mr. CARTWRIGHT. And I want to ask the same question for you, Ms. Halvorsen. Would the passage of H.R. 1112 eliminate or great-

ly reduce the time and money that you need to spend on sending out firearm retrieval referrals to the ATF?

Ms. HALVORSEN. So just coming back on, obviously, surging resources, we surge that so we can meet the 3-day window; it would absolutely stop us needing to be able to surge resources to meet that 3-day window. And as we work through the process, right, any more time would absolutely assist in the process.

Mr. CARTWRIGHT. And it would save money too, wouldn't it?

Ms. HALVORSEN. That, sir, I don't know. We would have to come back and look at that on saving money.

Mr. CARTWRIGHT. Very good. Thank you so much.

I yield back, Mr. Chairman.

GAO REPORT: FIREARMS PROSECUTIONS

Mr. SERRANO. A 2016 Justice IG order of the handling of firearm purchase denials noted a big drop in prosecutions since fiscal year 2013. A recent GAO report requested by this subcommittee found that DOJ rarely prosecuted individuals who falsify information, such as not disclosing felony convictions. In 2017, of 112,090 denials, ATF referred 12,710 for further investigation, resulting in only 12 prosecutions. In contrast, GAO found three states that reviewed their denials that had had a higher proportion of referrals and a high conviction rate.

GAO recommended ATF assess the use of warnings to applicants who misrepresented their eligibility for gun ownership rather than pursue prosecution in lieu of prosecution.

Deputy Director Brandon, has ATF taken action on these recommendations?

Mr. BRANDON. Yes, sir. In fact, it was a year ago yesterday that then-Attorney General Sessions sent a memo out to all his U.S. Attorneys across the country, which, incidentally, they have been crushing it with firearms prosecutions, but he addressed that specific issue about lie-and-try. There have been some U.S. Attorneys in certain areas of the country that have increased that.

The numbers are still relatively small, but the percentage looked like it is a high percentage increase. But I would like to get back to the committee with those specific numbers to answer your question regarding standard denials, which is when the firearm didn't transfer, the person lied on the form, and the U.S. Attorney's Office prioritized their resources to maximize prosecutions of all the cases they have.

Mr. SERRANO. Well, that is the thing. I can tell you that in conversations amongst Members of Congress, not in a formal setting, one of the concerns is the low prosecution rate as we interpret it and as many in the press interpret it.

So did I ask you the right question or is there something else we could be doing?

Mr. BRANDON. No, sir. I could just show you, someone has three violent felonies or a misdemeanor crime of domestic violence, and we see that there is a standard denial and they didn't get that, we will work with the U.S. Attorneys. And, to be honest, the cuffs have been slapped on a few of them, you know, recently I have gotten them through our notification system.

So it has improved and I give Attorney General Sessions credit for cracking the whip with the U.S. Attorneys, and they are moving.

DELAYED DENIALS

Mr. SERRANO. And could you tell us to what extent your divisions use warnings in denial cases?

Mr. BRANDON. Yes, sir. This goes into the regulatory process, you know. At ATF, we want people to be successful in their business, if they're operating legal businesses with lawful commerce, but we can't be a capture component of our regulatory component. So, unless something is really egregious, like as far as a warning letter or a warning conference, it is progressive to try to get them in compliance, but if they don't and they fail to do that, we will go after their license.

We have done that and that is where we have a national look at that, so we are consistent. Where one businessperson says, hey, I was treated differently because, I was in Alabama, another was in Pennsylvania. So that is why it was brought up to the national level to be fair to these businesspeople.

GAO REPORT

Mr. SERRANO. Now, the GAO report also showed a patchwork of policies where each ATF field office and each U.S. Attorney's Office had different standards for investigating and prosecuting individuals who falsify information on their applications and referring cases to state and local authorities.

How can we do a better job coordinating these efforts? Should we have someone overseeing these policies to ensure we are all going in the same direction?

Mr. BRANDON. Sir, one of the things which we established with myself and my team is that every year the Special Agent in Charge for the field division and whatever judicial districts he or she has to certify that there is what the U.S. Attorney will accept for these standard denial cases, and I think that been helpful.

And the other thing in working with getting the information from the FBI, collaborating, is how can we share this information with state fusion centers. So it can be beneficial, because you say, hey, you may not want to prosecute this guy, but say he is a gang member, and he is trying to buy a gun, it can be intel that can be used.

In past committees I have been asked that question, we went back and worked as a team. And I really think that is a good way of saying, instead of letting the information sit on standard denials, you know, if they are not going to be prosecuted, how do we share that in an intelligence capacity, and that maximizes public safety and that is how we have approached it.

GAO REPORT: FIREARMS PROSECUTION

Mr. SERRANO. Now, do we know if different U.S. Attorneys have different standards?

Mr. BRANDON. Sir, I will have to get back to you. I was going through a bunch. I believe, just my experience, I think there are

93 judicial districts. I think it would be a statistical improbability to say you have got 93 U.S. Attorneys who are usually—whatever, you are Democrat or Republican, they are usually spirited people and that they have to be consistent across the lines, because they are all addressing different things, and I know you know that, sir, with all your experience.

ATF RESOURCES

Mr. SERRANO. So here is the question you love to be asked. Would additional resources enable ATF to pursue more prosecutions of individuals who falsify or misrepresent their status on Form 4473, which is the firearms transactions record?

Mr. BRANDON. Yes, sir, obviously more resources would lead to potentially, more but—and, again, it all goes back to what gets prosecuted. And with our limited resources, to be candid, I have been saying, if we are not in step with the U.S. Attorney, we are out of step with him or her, because we don't want to waste our time investigating something that is not going to get prosecuted. So, you know, front load it, you know, work as a team, work with our partners, and have maximized value to the American taxpayers to say, hey, go after the violent people that are wreaking havoc, particularly in the inner cities and other areas of the country. I don't want to leave out rural areas, but we could do more with more, sir.

And I don't want to beat a dead horse, I believe I said what I said to Mr. Case, on behalf of the men and women of ATF, who I am very proud of.

FIREARMS TRANSFERS

Mr. SERRANO. Firearm retrieval is a term used by NICS for the action recommended after a background check is unresolved within the 3-business-day time frame, and an FFL proceeds with a firearms transfer, but subsequently learns that the request should have been denied, the NICS section then notifies ATF that a prohibited person is in possession of a firearm and ATF can undertake action to retrieve the firearm.

In 2017, 6,004 referrals for retrieval were made to the ATF, but the NICS section and ATF assessed that in 1,140 of these cases the transfer was undetermined.

What does transfer—what does that mean, transfer undetermined?

Mr. BRANDON. Sir, I think it is, we will get the information from the FBI saying, hey, the firearm was transferred, it is a delayed denial. The branch that is in Martinsburg, West Virginia that looks at this for ATF will have all the documents for each judicial district to say look at the criminal history. Here is what I am fairly confident in saying. Say the guy had a dope conviction of under 25 grams of cocaine in 1980, nothing else, would the U.S. Attorney's Office prosecute? I would be 99.9 percent accurate, absent any other intelligence, that it would say, hey, refer that to the division to be looked at to investigate, because that is the filter. Because there is such a volume—it is a prudent step. But say it comes back going, hey, guess what, this guy has a misdemeanor crime of domestic violence, he whooped the hell out of his wife or former part-

ner and everything like that, and that was only 12 months ago or 6 months ago. Get that thing to the division, you know, and let's go get that gun from that guy.

The U.S. Attorneys—when you have that type of threat to public safety, they will go after them, but that is the type of filter, sir, that has happened, and that is why the numbers go down to what goes to the field.

Mr. SERRANO. One last part to this. Does ATF have a responsibility to confirm that a prohibited person has not taken possession of a firearm in such cases?

DELAYED DENIALS

Mr. BRANDON. Yes, sir. I mean, the delayed denial will indicate that they did take possession of it, and then we will work to make sure that, like I said, they can return it to the gun shop, turn it over to a third party that is not prohibited and not cohabitating with them, or that we will go and get the firearm from them.

Mr. SERRANO. Thank you.

Mr. Aderholt.

Mr. ADERHOLT. I have got one more question for Director Halvorsen, before I go to Director Brandon.

FIX NICS ACT

What has the FBI done to ensure that it is complying with this 60-day requirement on the Fix NICS Act?

Ms. HALVORSEN. Thanks for asking that question, because it has been a big effort at CJIS that they are actually very proud of and that they have worked very hard. And so we have actually moved resources from one other area of CJIS over to this group and they have actually automated a significant amount of the process, and because of the automation that we have put in place and some technical enhancements, they are able to get through the backlog and with the new cases coming in every single day—usually within a 45-to-48-day time frame.

NATIONAL INTEGRATED BALLISTIC INFORMATION NETWORK (NIBIN)

Mr. ADERHOLT. Of course, it was back in 1999 that the ATF established the NIBIN, which provides federal, state and local partner agencies an automated ballistic imaging network. And I notice that NIBIN's programs can be expensive and not every district has a NIBIN site.

What is the key goal of NIBIN? And that would be for you, I'm sorry, Director Brandon.

Mr. BRANDON. Thank you, sir. I thought it went to the FBI for a second.

Mr. ADERHOLT. Yeah, I was—

Mr. BRANDON. So the key goal of NIBIN is, again, like I mentioned, it is to identify the people that are pulling the trigger—and this is where law enforcement, I believe, more so at the local level, but us as federal partners working, we used to target whole areas in a neighborhood. And, to be honest, you can go in there and, you tick off a lot of the people, you know, because they think, hey, why are you focusing on this area and me?

What NIBIN helps us do is drill down to the small numbers that the locals know better than anyone of who is pulling the trigger, because it is a smaller percentage of criminals that are actually doing the shootings, and NIBIN gives you that critical lead. We have tried to maximize the use of NIBIN. The Phoenix PD, a wonderful PD that uses NIBIN, they open up other PDs in the suburbs to come and submit casings to them. So it is a cost-efficient way and it can relate shootings that may happen in Chandler, Arizona and Phoenix, Arizona, sir.

VIOLENT GUN REDUCTION STRATEGY

Mr. ADERHOLT. OK. Can you talk a little bit about why it is vital to overall violent gun-reduction strategy.

Mr. BRANDON. Yes, sir. And, again, I mentioned about our Correlation Center and if I can—I know time is short, Mr. Chairman—someone pulls a trigger on a gun, a semi-automatic pistol, and a casing comes out. What's critical for the police chief, he or she makes it a policy, and not just policy, but a changed culture—I have been around where if no one is shot, they clear the run, they move on, and the casings could be still lying in the street. You have a comprehensive collection plan of those casings. Those casings go into NIBIN. Someone doesn't know the shooting and all of a sudden, there is someone that is dead or there is a non-fatal shooting. It could match that up.

We have used it as a leads generator which is the game changer. We were critically faulted by Sam Houston University—it was funded by a Bureau of Justice Assistance study, I think in 2012—12 months to 18 months—the information is not timely relevant and actionable. We have changed it down to 48 hours through the Correlation Center and with these PDs comprehensively, picking that evidence up in there.

So, to answer your question, it is a vital technology, along with our Crime Gun Intelligence Centers, with e-tracing, and with other technology that can help us find the casings—they call it gunshot detection technology—I call it like the fish-finder, and so forth. You put all of that together, sir, and I think it is what you all want. Hey, find the people that are really doing the shootings and that will have the most value for your limited resources to take these people off the street. And we don't care—state, federal—they are the ones causing harm on everybody.

GROWTH IN COMMERCE OF FIREARMS AND PERMIT PROCESSING

Mr. ADERHOLT. ATF's work has seen a significant increase due to the expansion and growth of commerce within our industry, as you noted earlier, and, certainly, I commend ATF's effort to establish the e-forms, which is the electronic filing process to help reduce submission and processing times, as well as data-entry backlogs. And I believe Congress provided a combined 23 million in fiscal year 2018 and fiscal year 2019 for activities at the national—of the National Firearms Act Division to continue improving the processing of the Act's application to further develop and implement ATF's next generation of e-form systems.

E-FORM FILING

Can you give us an update on the improvement to the e-form filings process and to the reduction in the processing of backlogs.

Mr. BRANDON. Yes, sir, and thank you for the question. I want to stress, because we have our criminal enforcement side and we have our regulatory mission of firearms and explosives industries, and we are sensitive to that equally as well, so we appreciate that funding. One of the things we did with the appropriations you gave us, is that we put it on contracts because in order to expand the electronic forms and the speed, we had internal IT issues. And so, we have gone to the cloud. It is posted on the ATF website, but I can have it provided to the committee on the waits. I think now for Form 1, we are down to a month. When we were shut down, we were prohibited from acting on any certain forms unless they are related to the law enforcement, military, or to our government contracts.

So, we had our wait time down to five months. It is gone up a few more months, but our goal is to get that down. But we also did a look at the touchpoints on how we can be more efficient and effective. So, with this money, we saw an IT issue and now we have contracts that are going to help us speed up the reply from NFA for the fingerprints and so forth, that we can have this down to days instead of months to wait, and that is what those funds are doing.

With the CR & A team, we were not able to put them on contracts right away so they work now on it from the 2018 money. But, that will help speed up us processing those forms and we thank you for that attention.

NATIONAL FIREARMS ACT

Mr. ADERHOLT. Can you describe just briefly how the National Firearms Act restricts the sale and the purchase of firearms.

Mr. BRANDON. Yes, sir. Guns are a sensitive issue, but 1934 was the enactment of the National Firearms Act. So, it was machine guns, silencers, you know, the old tommy guns, and Congress, you all ruled and said, Hey, we want to regulate this. So, that is where we have the person's name. We have their address. We have the make, model, and serial number of the firearm, and there is a picture and photographs that come along with it, and the person can't get that firearm until that is approved and then they can't even transfer that firearm to someone else unless it is approved. So, that is how the National Firearms Act works and it is for those items that Congress declared exceptionally risky to public safety: machine guns, silencers, short-barreled rifles, and short-barreled shotguns.

ACTIVE SHOOTER INCIDENTS

Mr. ADERHOLT. You, as we all know—and it is very unfortunate Americans have increasingly faced incidents of indiscriminate violence in schools and shopping malls and other public places. Can you elaborate for just a moment on efforts that the ATF and the FBI are involved with to help minimize and respond to when there is an active-shooter incident.

Mr. BRANDON. What is the response?

Mr. ADERHOLT. Yeah, just how you can help minimize or how you all help respond to those particular instances.

Mr. BRANDON. Sure. Well, one of the things that I am very proud of, is that we established an internet investigation center dealing with firearms commerce over the internet, people doing illegal things, and so forth. A byproduct of that, sir, is that our folks became good where they detected information about potential school shooters or other acts of violence. We don't publicize it, but we immediately share the information with the locals and just within the last few months, I think I have had two or three that have come up to me and I tell our folks, hey, jump on it.

And I have to say, the locals are happy when FBI, ATF, and the U.S. Marshals respond to scenes together. That is the DOJ response now and I think we have really improved on that for the better. But I just share that, sir, because you asked about threats to school safety or workplace violence. Our investigation center, they have developed an expertise and we share it with everybody rapidly, to answer your question.

Mr. ADERHOLT. Ms. Halvorsen?

ACTIVE SHOOTER INCIDENTS CONT'D

Ms. HALVORSEN. Thanks for the question. We are making a lot of steps. I mean, it really comes down to partnerships and sharing intelligence, and if we are all sharing the intelligence, together, we can put the pieces together a lot quicker to try to stop these events from happening.

And those partnerships, over the years, have changed. You should not be meeting someone for the first time in your community, right, especially a law enforcement partner the first time on an active-shooter situation. You should be training together, which we are doing with our law enforcement partners and also our federal partners. You should be having active-shooter plans together and meeting together, and that is what we, as the FBI, have been doing throughout the different communities through our SACs.

NICS

Mr. ADERHOLT. I think it was you, Director Brandon, you mentioned that it is important to prosecute individuals who lie on their 4473 forms, and if a person is denied the ability to purchase a gun because the NICS indicates that they are an illegal alien, do you think that the individual should be prosecuted and this information be transmitted to the law enforcement partners at ICE, due to the danger of criminal alien groups like we have seen with MS-13?

Mr. BRANDON. Sir, that is a great question. And if it doesn't get prosecuted at the district level by the U.S. Attorney, based on their parameters I will give you an example. The southwest border, our folks in Phoenix, Arizona, have taken that information and they share it with ICE. If they are going for an immigration hearing, we want you to know that this person tried to buy a firearm in this state.

So, that is where—hopefully, I am answering your question—is that we are trying to maximize that standard denial intelligence that we get in knowing they will say, oh, we are not going to get

prosecuted, but what can we do? And we are putting it through the state fusion centers and at local levels, again, where you have immigration issues, we will share that and they can use it as they see fit.

Mr. ADERHOLT. So, the bottom line is they should be prosecuted, so absolutely.

Mr. BRANDON. Yeah, so, MS-13, I hate them, right? In going after MS-13, we do that. The FBI does that. We are working hand-in-glove locking up MS-13 gang members that are shooting and chopping people and everything like that. I don't know what your political stripe is or whatever, but how could anybody argue against that?

Mr. ADERHOLT. Thank you, Mr. Chairman.

Mr. SERRANO. Mr. Case.

Mr. CASE. Thank you. Ms. Halvorsen, Fix NICS, status of implementation and do you have the adequate resources to fully and timely implement?

Ms. HALVORSEN. So, we have already been implementing Fix NICS for months now. We are obviously, as I testified to earlier, within that 45- to 48-daytime window on the appeals, which is under the 60 day mandate, and part of that, too, is we have hired contractors to help us, as well, which I forgot to mention. They go out and get dispositions for us that we haven't been able to get and they research dispositions to fill that void of dispositions, as well, through the resources there to adequately address that process.

As far as working with our partners, I mean there are a lot of partner agencies involved here with Fix NICS, including our local, state, and tribal partners, right, and our federal agencies.

Mr. CASE. What's the status of the implementation plans at the state level?

FIX NICS: STATE LEVEL

Ms. HALVORSEN. So, at the state level, we are still working with each state individually and their plans are due back by March 25th, next week or the week after—

Mr. CASE. I see.

Ms. HALVORSEN [continuing]. And so, we have some of the plans ready, and we are working with each individual state and, actually, each individual municipality, because everybody is different on what stages they are at, so everybody has different needs. So, we have plans with each one of those to address—

Mr. CASE. Do you feel that you are adequately resourced to implement fully, timely right now?

Ms. HALVORSEN. So, the FBI is addressing it with the adequate resources that we have. It is whether the local—

Mr. CASE. That is the diversions from other places?

Ms. HALVORSEN. No, actually, these were—

Mr. CASE. Internal?

Ms. HALVORSEN [continuing]. Part of the—bodies that we received in fiscal year 2019 that we have helped put over there.

APPROPRIATION RIDERS

Mr. CASE. OK. And then, let's see, going back to kind of my appropriation-rider set of questions, I think there is one that is appro-

priate for you which is a rider requiring the destruction of records of background checks through which the buyers are approved within 24 hours of approval. So, then, is that correct, as a matter—

Ms. HALVORSEN. I'm sorry, can you repeat that. A rider?

NICS

Mr. CASE. Background checks have to be destroyed within 20—

Ms. HALVORSEN. If they are proceeded.

Mr. CASE. Pardon?

Ms. HALVORSEN. If they are proceeded.

Mr. CASE. Right. Within 24 hours.

Ms. HALVORSEN. Yes, I'm sorry.

Mr. CASE. Do you have any concerns with that? And the scenario that sometimes I think about, and others do as well, is, fine, the background check is destroyed. You have got a concern over a particular person and you want to know whether that person has actually purchased any firearms within recent history. Is the destruction of that background check a hindrance from knowing that?

Ms. HALVORSEN. So, we are just following the legislation as it is passed.

Mr. CASE. I understand, but I am asking you whether you think the legislation is or should be continued as an appropriations rider or otherwise from your perspective on adequately figuring out whether somebody is a risk.

Ms. HALVORSEN. Yeah, I think that is a discussion we have to have further about it with also our other agency partners, because it is not just an impact on the FBI; it is an impact on all the partners if that is changed.

Mr. CASE. Do you have a view on that?

Mr. BRANDON. Sir, I am going to have to defer to the FBI.

Mr. CASE. Wait a minute, you can't both defer to each other. I'm sorry, somebody has to answer the question.

Mr. BRANDON. No, I feel what you are saying is, this is the law, we follow it. But the general theme is, if you have more time and access to information, can that be for making better decisions or leading to investigations?

Mr. CASE. But just having information that is no longer available that may be relevant in a particular situation; that is what I am concerned about.

Mr. BRANDON. Yes, sir. And that is where I would think it would be a healthy discussion for all of you. I will just say when I make a decision, when I have proper information and I have enough time, I usually make better decisions.

APPROPRIATION RIDERS

Mr. CASE. OK. And then, Mr. Brandon, I am going back to my original question on the appropriations riders that I think are in your bailiwick. So, I have got a couple here that have been accumulated over recent years. Again, these are riders that you are functioning under right now. One does not require gun-dealer physical inventories, as I understand it. Another hinders or also disallows you from working with other federal agencies in certain areas. One does not allow you to create searchable database of records. And I think the third one that I think you may be talking about, which

is not pursuing multiple gun traces to look for patterns, are you familiar with all of those restrictions and do you have a view as to whether any of them should be repealed?

Mr. BRANDON. Sir, what was the first one?

Mr. CASE. OK. I have got—the first one says, no requirement of physical inventories for gun dealers.

Mr. BRANDON. Sir, like you said, it is an appropriation restriction. It becomes like law. We abide by it. I just share that, you know, people are operating legitimate businesses and if you are operating a businesses to stay in business and maintain an inventory, that would be something I think that you all should discuss.

Mr. CASE. Yeah, OK. The second one, as I understand it—and I may not have the deals—restrict your ability to work with other—coordinate your efforts with other federal agencies. Are you familiar with that one?

Mr. BRANDON. Sir, are you talking about trace information?

APPROPRIATION RIDERS CONT'D

Mr. CASE. I think trace is separate from this particular area. If I don't have adequate information, then I—

Mr. BRANDON. I don't know of anything that prohibits us from working with any law enforcement organizations—state, federal, local, or tribal.

Mr. CASE. OK. So, let's then, take the trace information restriction. Can you speak to that?

Mr. BRANDON. Sure. I think it is the Tiahrt Amendment. Actually we were a supporter of it because we were afraid of undercover investigations and undercover agents, in particular, being jeopardized and hurt because that information could be subject to Freedom of Information Act requests. The historical record on that is we support that.

Now, we share trace information with law enforcement agency. They get it. What they do with it, it is their decision; we leave it up to them to make the proper decision of who they share that with. But that is something that has been beneficial to prevent some long-term undercover investigations on gun trafficking and going after store purchasers—and undercovers dealing with them—that could be compromised if it wasn't protected information.

Mr. CASE. OK. Thank you.

Mr. SERRANO. Mr. Cartwright.

Mr. CARTWRIGHT. Thank you, Mr. Chairman.

ATF'S RESOURCES

Mr. Brandon, you expressed unequivocally the point that ATF is underfunded. And you are not the first one on Capitol Hill to say that recently. The House Judiciary Committee held a hearing on H.R. 8 on February 6th of this year and there were several witnesses who testified that ATF is not properly funded. In fact, one law enforcement witness said it was an open "secret" in law enforcement that ATF was—is underfunded.

I have read your testimony and it is to have been me that you are trying to take ATF in a new direction with respect, particularly, to technology- and intelligence-based policing, in fact, you just mentioned internet investigations.

This Congress is clearly motivated to address violent gun crime in this nation and I want to make sure that as we pass common sense gun-safety laws, we properly enforce—we properly fund the agencies tasked with enforcing those laws. The question is, I'd like to hear from you, what could be done with another twenty-five, thirty-five, \$45 million dollars in your budget and how would you prioritize the use of those additional funds?

Mr. BRANDON. Well, thank you, sir, for the question. Like I mentioned, we have robbed Peter to pay Paul, as far as the Correlation Center is concerned—You hit the point and from my statement, myself and my team, we have really worked hard to say, where do we bring value?

The Police Foundation did a report in 2016, actually, for the new Trump Administration coming in, in 2017. The number one thing that the major city chiefs wanted was NIBIN. The second thing was eTrace. The last thing that they wanted was what we were doing, or the surges or enhanced enforcement initiatives. They don't want a flash in the pan; they want sustainability and we knew that, and that is where we have pivoted as a team.

So, to accomplish those objectives, for instance, in 2019, we couldn't buy any government cars for our employees. We had to cut and we delivered for the Administration, as we should, because, again, they were being supportive. But we knew these \$40 million in cuts in 2019 were not sustainable and now we are going into 2020, and I don't want to be technical, but when the 2019 budget was being formulated, the CR was still going on for 2018. So, they started with a number that was 20 million lower than what we got, and so, we were already in the hole and digging out.

So, I am not an alarmist by nature, and I am fiscally conservative, but I wouldn't be doing my job speaking to you distinguished folks if I did not rightfully say that ATF needs to be funded. And I think it was Art Acevedo, (phonetic)—he is the police chief and now the head of the major city chiefs that mentioned that. We are a good investment.

NICS

Mr. CARTWRIGHT. All right. Thank you for that.

And, finally, I am also concerned with a situation that occurred recently in Aurora, Illinois, in which a man killed several co-workers with a firearm that he “legally” purchased years earlier from a gun store. And I say “legally” because that sale never should have happened, based on the shooter's 1995 felony conviction in another state.

Now, Illinois conducts their own background checks and apparently, they missed the conviction from the other state in their query of the shooter's criminal history in 2014. The State even issued this man a firearm-owner identification card prior to the sale, further demonstrating this flaw in the system.

My question is, do either of you have any information regarding the number of times a person with an alternate permit or other state firearms purchase card successfully purchased a firearm when they would or should have failed a standard NICS background check or even a state-run background check?

Ms. HALVORSEN. Obviously a tragic situation that happened there, but we don't have the data right now. We would have to go to each individual state and get that data and compile it for you.

NICS CONT'D

Mr. CARTWRIGHT. OK. Same answer?

Mr. BRANDON. Just so you know, when he got picked up, it was because he went for a CCW permit to carry a gun and it was the fingerprints that I needed and I think what happened was it showed the state system—I think it was Mississippi—they did not have the records from the FBI to be able to alert them.

Mr. CARTWRIGHT. Would it not make sense to require a state that issues an alternate permit periodically to update the record via a comprehensive background check, and if so, do you have any recommendations as to what the interval should be for those updates?

Ms. HALVORSEN. Again, when we do the checks, right, the information is only as good as what is in the systems and what we have from the states. So, we, again, work very hard to try to get them to update their information as we see it when we conduct audits in our system and we feel that that information needs to be updated, and so, that is how we go about making the decisions—

Mr. CARTWRIGHT. The question is, it is one of those “what should be” questions.

Ms. HALVORSEN. So, the more information you have and the more time you have to make the decisions, the better off the decision is going to be.

Mr. CARTWRIGHT. Do you agree? Would it make sense to require updates like that?

Mr. BRANDON. Yes, sir. I know that we accept, and I think it is by law that if someone has a—are updating that to make sure, should that person still have that, they could go ahead and get it done and they wouldn't have—

Mr. CARTWRIGHT. So, it would make sense to require updates. Do you have a recommendation on how often?

Mr. BRANDON. No, sir. I just think that anything that you all decide that tightens things up to make sure that the proper people get firearms and the ones that don't, don't—

Mr. CARTWRIGHT. All right. I thank you both.

I yield back.

Mr. SERRANO. Ms. Kaptur.

Ms. KAPTUR. Thank you, Mr. Chairman. I apologize I am late. I had other activities outside the building I had to take care of this morning.

Let me say to Directors Brandon and Halvorsen, you both have such impressive backgrounds. Thank you for your service to our country.

And I have to say to Director Brandon that I noted your work in Detroit and your degree from University in Michigan—Oakland—in Oakland. These are areas just 20 minutes from my district in Toledo. So, you have seen—you have both had tremendous experience.

My question really goes to—first of all, you have my support and probably more support than you want—but I am interested in pat-

terns of criminal activity. Probably one of the most important books I have read is by Sam Quinones, *Dreamland*, because I was trying to understand the drug trade in much more depth.

And, generally, when something horrible happens, whether it is ISIS-related or whether it is a gang-related crime, there is a story in some newspaper somewhere in the country and they report on that. But I am interested in patterns, patterns of criminal activity.

PATTERNS OF CRIMINAL ACTIVITY

And so, I am going to ask you in two areas, if you could comment on this and anything additional that I could do to help you collect the data and interpret it to guide us. Obviously, Northern Ohio is a big concern of mine—I represent it—and we have a lot of crime, a lot of gun activity, and I don't believe that some of it is just isolated.

So, first, in terms of major shootings in this country that have occurred going back, let's start with something like Virginia Polytechnic where we lost a lot of innocent people and the perpetrator was mentally ill or we go to Sandy Hook—same thing. If I were to ask you to go back into your database and to string together the crimes that were major crimes like that and the gun, the weapon, is there a pattern that we can follow that would tell us something, especially when they are mentally ill, of what happened, rather than just an incident or something like that? Is there something about where we can learn about where they got the weapon or what can this pattern of continuing murder across our country, what do you know, maybe, that hasn't been organized in a way to educate the public?

So, I am very interested in mass murder and mental illness and guns and I am very interested, particularly from my region, in gang-related violence with guns and the drug trade. Ohio is, unfortunately, at the top of the list in terms of the number of deaths per capita. So, we have plenty of evidence of what these individuals are capable of doing. But it tendency to be reported incident by incident by incident and you don't get a sense of, well, where's most of it coming—where did the gun come from or guns come from and who are these individuals connected to?

Do you have any ability to create some order in our minds in either of these important areas, either gang-related crimes with guns or mental illness and guns going back, and help us understand the guns and where they came from, and how to—do you have the ability to do that in your data system?

PATTERNS IN CRIMINAL ACTIVITY

Ms. HALVORSEN. I love the way you are thinking and where you are going with this and you think big picture, and these are conversations that we have all the time, especially on intelligence-driven organizations on how do we address this, right, how do we address all the threats that are coming at us? So, one of the things that the FBI has worked towards with the Unified Crime Report system that we had for years, was always summary-based reporting, meaning that a summary would be written on the crimes in nine categories and it would just not really have a geographical or any breakdown on what types of crime.

The other problem with the Unified Crime Reporting was if it was an assault with, you know, a break-in and a trespass, right, the highest crime there would be the only one that would get reported; you wouldn't get both. So, you wouldn't know that a robbery actually caused the assault or the assault caused a robbery. You had no idea.

NIBRS

So, now, we have gone to the National Incident-Based Reporting System, the NIBRS system, which we are still working through, and by January 1st of 2021, all our local and state partners are going to be contributing into the NIBRS system, we hope. We are working with it right now.

Ms. KAPTUR. Is that in Ohio?

Ms. HALVORSEN. Yeah. And we are working with all—

Ms. KAPTUR. Toledo?

Ms. HALVORSEN. We are working with every single state to report into NIBRS. Some are further along in the process than others, but NIBRS is incident by incident, and what we have seen is that the law enforcement agencies that have been able to come on-board sooner into that system are now able to reallocate their resources much more quickly to the areas of violence that are occurring because they have an incident breakdown. We have actually created a web interface.

Before, they had to wait until we issued the report. Now, every day they can go into one of the statistics they are reporting and actually use it as a tool, themselves, and run their own statistics. They can even use it at roll call to determine where they are going to allocate their resources that day.

So, what we have seen is that it is been very, very instrumental to strategically go after the threat instead of waiting for the summary report to come out, you know, twice a year or once a year.

Ms. KAPTUR. Each member, I mean, we know our districts, and it would be very interesting, to the extent that you can help us understand—unwind what's going on there. We are not going to ask for confidential information, but right now it is so diffuse.

I ask myself, as a member, you know, how can I help my local sheriffs? How can I help the local chiefs of police? What can we possibly do to—and with the young people with these guns, I am saying to myself, Where do they—how does all this get in here? And I just don't have a clear path because right now—so, it'll take till 2020; I hope I am still here—but I am concerned about the lack of focus, and maybe it is just held by law enforcement be officials and we are not allowed to know all that.

But I just don't feel that we are doing enough, certainly, in the mental illness area. You never read a story where you go back 20 years starting with when Russell Weston came into the Capitol here and killed two of our police officers and tried to get in the majority leader's office and all that, and it is like a story and then it fades.

But what if you piece together all of them, what is it telling us? I think there is something there that is a bigger message that we need to understand and I don't think we have it.

Ms. HALVORSEN. So, I would absolutely invite you to come out to CJIS, just to sit down with our folks who gather the crime-specific data, and let them walk you through the process of how they do that and the relationships we have with our law enforcement partners and how they use that information and also, to walk you through the intelligence, how we use intel to drive those operations, as well.

Ms. KAPTUR. Can I listen to Mr. Brandon, Mr. Chairman? Might I have an additional 30 seconds to listen to his reply? Thank you.

Mr. BRANDON. Thank you, sir.

CRIME GUN INTELLIGENCE CENTERS

Ma'am, I have a specific answer to your question. It is our Crime Gun Intelligence Centers. We have established these, and exactly what you are asking for, that is what we have drilled down on. What Mr. Cartwright observed is we are using technology and intelligence and working collaboratively with our law enforcement partners to go after the trigger-pullers—who is pulling the trigger—and who is supplying that trigger-puller with the firearm, and we call them a trafficker. So, it is the two Ts; the trigger-puller and the trafficker. Our Crime Gun Intelligence Centers have been uniquely designed to answer your question.

We would be happy to give you, with respect of time, separate presentations. We invite you all down to our Correlation Center in Huntsville, Alabama. But exactly what you are asking, we have been working at it.

Ms. KAPTUR. I have to go to Huntsville to find this?

Mr. BRANDON. No, we will come to you or we will go wherever. What's wrong with Huntsville?

But I share that, ma'am, because that is where we are providing a service to the police departments, I believe, in your jurisdiction, that can get that correlation service. Because, as you know, you go into whole neighborhoods and you say, hey, we are going to target it, and you tick a lot of people off, innocent people that may just be living there because that is where they live, instead what you are asking is: Who is shooting people and how are they getting the guns? That is what we are solving in Crime Gun Intelligence Centers.

So, thank you, Mr. Chairman, for letting me have that time.

Mr. SERRANO. Mr. Crist.

Mr. CRIST. Thank you, Mr. Chairman. I want to apologize, too. I had a conflicting committee meeting and apologize for running late. Thank you for running this hearing.

Thank you, Ms. Halvorsen for being here and Mr. Brandon. I appreciate your presence today and what you do and your service to our country.

My home state of Florida has been devastated in recent years by gun violence and mass shootings. In both, the Pulse nightclub and Parkland High School mass shootings, neighbors and co-workers were warned—warned, rather, the FBI.

The Pulse shooter was openly sympathizing with terrorists at work. His co-workers called the FBI tip line. The FBI opened an

investigation and put a tail on the individual, but nothing became of it. Then he illegally bought a weapon and used it to kill 49 people and wounding 51 more, many critically. For them and for our state, particularly in the Pulse situation, the LGBT community and the Latin community, the wounds will never heal.

There were multiple warnings about the Parkland shooter. His YouTube comment about becoming a school shooter was reported to a local FBI field office. One month before the shooting at Marjorie Stoneman Douglas, a young woman who knew the shooter, called the FBI tip line and for the next 14 minutes, provided specific details about the shooter, talking about animal mutilation, severe temper, violent threats, stockpiling weapons, social media, all in a transcript.

He killed 17 people six weeks later, including 14 high schoolers. The Stoneman Douglas kids changed this country. They demanded that we put the lives of our children, the lives of their friends and loved ones first. They should not have had to be because Parkland never should have happened.

With both Pulse and Parkland, the FBI was alerted. In both cases, that did not stop it. What exactly went wrong? And I want to know the failures that occurred in the Bureau, how your policies and procedures have changed, and where the failures in our laws gave these two monsters access to weapons of war and what this committee can do to support you to make sure that these kinds of things don't happen again, please.

MASS SHOOTINGS

Ms. HALVORSEN. So, very tragic events. And in my 23 years, I actually worked gangs in New York before I came to headquarters, and so I saw a lot of this, right, throughout my whole entire career and then worked counterterrorism right after 9/11, as well, so I have seen a lot of this. So, my heart goes out to the families and having been on the other side of having to tell families and victims and working through all that, right.

And so, we continue to work with the Parkland families. It is the men and women who work in CJIS who answer those calls—I gave statistics earlier—they handled 655,000 calls last year and 755,000 e-tips that come in. Not every call is a threat to life, but they have to go through each call to figure out if it is a threat to life.

We have changed all our procedures since Parkland to work through that. They have gotten enhanced training. They get threat briefings now. They get briefings on how to handle potential school shootings. They have gotten new standard operating procedures that they are operating by. We have more supervisor review. We have implemented new procedures in the chain of approvals and how to get through those approvals. We have technology enhancements that enables them to get the information to their fingertips a lot quicker, and we are actually working to get the information out to the field offices very quickly and have implemented procedures on top of the field offices on how they are handling those threats that are coming in, to work with our partners and our fusion centers, as well, to get the information in the action officer's hand.

And that is why in my opening statement, I don't talk about an FBI agent, you know, who gets information. It is an action officer who can action that information very quickly, that we are working towards.

And so, we have put all those procedures in place and continue to work in modifying our processes as the threats happen. We don't want any of these to happen anymore, either. This is what we have worked so hard for. This is why we joined the organizations that we did: to keep the public safe.

And every time something like this happens, it kills us inside, as well, and we strive harder and harder to make sure that it doesn't happen.

FBI RESOURCES

Mr. CRIST. Is there a specific goal or amount that you would like this committee to help provide you in order to further prevent these things from happening? Have you thought about that?

Ms. HALVORSEN. Yeah, and it goes to the question that you posed; I really would love for you to come out to CJIS and sit with these people who are taking these calls every day and going through that to see, really, what they are dealing with on a daily basis and how they are going through it so you have that education.

I have been out there now for two months as acting Assistant Director. I have been in the Bureau 23 years. It is my first experience out there. I knew they did great work, but they do amazing work every day. As a matter of fact, just this weekend, we actually referred a threat-to-life issue to our Los Angeles Field Division. Within an hour time frame of receiving it, they—it was an individual who was making threats online—quickly identified, through getting a 2307(d) order who that individual was online. Then they went out to the house and found out that person had mental illness issues and was off their meds, right, and they were able to stop this person from committing violence before it even happened and was able to work with the family to get this person the treatment that they needed.

They are doing things like that every day, and so it would be great for you to come out and see the work that they are doing and the changes that we have made and where we are going. And especially from your constituency, coming out there and saying, well, this really doesn't work because this is what they told me, it would be great to get your feedback, as well, on the work that we are doing out there, as well.

MISSION OF ATF

Mr. CRIST. Sure. Thank you very much.

And, just briefly, Mr. Brandon. You are at ATF. How would you describe the primary mission of your agency?

Mr. BRANDON. Sir, we are guns. It is about 82 percent of our budget, as far as enforcing the federal firearms laws. We also, I guess the catchy phrase—bang, boom, and burn—you know, where it is most people don't realize that we are involved in arson investigations. We have the Federal Fire Research Laboratory, the only

fire research asset in the federal government, and we support our federal, state, and local partners, and tribal partners with that.

But our main mission is violent crime; particularly, firearms—violent crime related to firearms or criminal acts of arsons or criminal bombings. Obviously, whenever I hear you say the T-word, our role is to be no better partner to the FBI dealing with terrorism, and so I think that the ATF and FBI have made strong progress and have a great working relationship that benefits the American people. It is the public first.

Mr. CRIST. Yes, sir. So, is it safe to say, then, to summarize, that it is your mission to primarily prevent violent crime by the usage of guns?

Mr. BRANDON. That would be our primary mission, sir, yes.

ATF RESOURCES

Mr. CRIST. In the—how much money do you need more to do that, and then I am done?

Mr. BRANDON. About 60 million.

Mr. CRIST. Did the president recommend that?

Mr. BRANDON. Sir, I don't know, and you know, I salute to the administration. I am here testifying under oath and being honest. Like I said, you cut fat. You say we are cutting at the muscle; we are cutting at the bone. That is the truth with the ATF.

Mr. CRIST. Thank you, Mr. Chairman.

DEFINITION OF "UNDETERMINED"

Mr. SERRANO. Thank you. A couple more questions. First of all, I admit to the guilt of having try to invent a new word. The word is "undetermined," but that has actually brought us to yet another dilemma we have, is that we still don't know what undetermined—transfer undetermined means. Does it mean the fact that the transfer or does it mean eligibility of the purchaser? I mean, what does transfer undetermined mean? We don't want to leave this hearing not knowing what that means.

Ms. HALVORSEN. Just from the FBI's perspective on that question, when we have a disposition—when we have a delay queue disposition come back and we are able to make the determination that that person should have been a deny and then we refer it over to ATF. If it is after that 3-day time window from the 4 to 30 days, they have the ability to purchase a weapon during those 4 to 30 days. At day 31 they have to come back in and re-apply, so from the 31 to 88 days.

In that 4 to 30 days, when we refer it over to ATF, we don't know if they have gotten a weapon or not. We can't tell if the sale occurred or not. So, in that 6,000, it is not that all 6,000 got weapons; they just had the ability to get weapons. And to the point of some of our partners working with some of the big gun sellers, they will not sell if you are still in that delay queue. So, some of those 6,000 may not have been people who fully got weapons.

Mr. BRANDON. Sir, on delayed denials, we don't leave anything undetermined. If it comes from the FBI and it looks like they have gotten a firearm, we track it by month. I get briefed monthly with my executive team and there has to be a resolution. Often times, there can be problems with obtaining court documents, which frus-

trates the FBI—rightfully so—and even with us having more time than 3 business days, we can say, hey, 30 days, 60 days, we are still trying to retrieve these records. But we don't leave anything undetermined, and that is tracked monthly and briefed up to me.

OVERSIGHT OF FEDERAL FIREARMS LICENSEES (FFLS)

Mr. SERRANO. Thank you. Previous ATF reports have indicated that nearly 60 percent of guns used in crimes can be associated with only 1 percent of federally licensed firearms dealers. Do you think that the ratio is still accurate? Does the ATF know who the troublesome gun dealers are? And what does the ATF do to make sure that these dealers are subject to additional oversight and enforcement?

Mr. BRANDON. Sir, that is a great question. And as I mentioned earlier, we have a continuous process improvement and this is one of the areas that we can improve. In fact, just three weeks ago, I was briefed on how we are going to have better oversight at the national level—the Division may say, these are our problematic federal firearms licensees that we need to inspect.

And I don't know if you are familiar with the term "CompStat" it started at NYPD, but it is used in data to question people's decisions and modeling. We are using a new computer product with analytics to question these assumptions. I really think it is going to take ATF in a more precise way of going after, to what you are saying, these dealers that are really not following the law and making and diverting lawful commerce into the black market where they become crime guns.

Mr. SERRANO. One last question, and it is almost a fun question, except that it is not; it is a very sad question, a new threat. The whole issue of 3-D printer guns. What kind of a threat do you see and what should law enforcement and Congress consider doing to address the threat?

3-D PRINTED GUNS

Mr. BRANDON. Sir, I know I dealt with this a few years ago, and it was the Undetectable Firearms Act that was renewed. I think it was called the Liberator firearm, a piece of plastic, 3-D printed, but you have to, to be compliant with the law, have a piece of metal that can be detected through a TSA security machine when walking through.

The threat we didn't see is maybe gang members doing this, but the threat to public officials or for any type of assassinations in which the 3-D firearms would be undetected and reassembled and so forth. What we see are self-made, unserialized firearms, which are legal to do. It is not illegal to make your own firearm and not serialize it, as long as you are not in the business of selling guns.

I had a briefing where our divisions in Los Angeles, San Francisco, and Miami are seeing an uptick in this, in particular, with gang members. One of these self-made unserialized firearms was used in a school—a community college shooting a few years ago. And so, they are not necessarily 3-D printing, but going to these legal firearms and this person, I believe, was prohibited, so he made his own gun, which the part he bought is not regulated and

they can make some minor modifications now and get unregulated parts like the barrel, the upper receiver, assemble it, and that is a threat to public safety. That is something that we are looking at.

Mr. SERRANO. Yeah, I suspect it is one that we are going to be looking at a lot because it is available to a lot of people and it creates, yet, another problem for all of us to deal with.

Mr. BRANDON. Sir, you have people saying you have hobbyists that legitimately—you know, I mean, I like guns and there are hobbyists that like making their own guns, but it also opens it up for the people who are prohibited that are not going to go into an FFL and go through a FBI background check NICS check and then say, hey, get this, three holes, drill it, get these parts, slap it, I have got my own gun and nobody knows the difference. We have a number of shootings that they are involved in.

Mr. SERRANO. Thank you.

Mr. Aderholt.

Ms. Kaptur.

Ms. KAPTUR. Thank you, Mr. Chairman, very much.

I wanted to go back to my question about mental illness and guns. For the most recent year for which you collect figures, how many fatalities have there been in our country due to shootings with guns? Sixty thousand? I think you probably have that number.

Ms. HALVORSEN. I don't have that number on hand.

FIREARMS AND MENTAL ILLNESS

Ms. KAPTUR. Okay. Because I am going to ask you if you could go back and get that number and, also, then, of that percentage, how many of those were due to an individual with a weapon who was mentally ill. Do you have the ability in your dataset to identify that or not?

Ms. HALVORSEN. No, we don't.

Ms. KAPTUR. Well, how sad is that? I want to just say this because I am going to ask you to work with your colleagues in other branches of the government. I will go through this, and I am looking for a report. I don't know who to go to for the report, but you are a good place to start.

If I go back to when Officer Gibson and Chestnut were shot here in 1998—both Chairman Serrano and I were present during that horrible incident—that was 1998. That perpetrator was a schizophrenic and had traveled all the way across the country looking for a purple light here in the Capitol. A few years later in Virginia, at Virginia Polytechnic, we had a mass shooting and the perpetrator was a paranoid schizophrenic. One of our dearest colleagues, Gabby Giffords was shot here or shot in her home community in 2011—the same thing with her perpetrator.

And each of these incidents happens in an isolated way, which I go back to my original line of questioning, is there any way you can work with your colleagues across the establishment of the federal government, to look at the numbers of how many people die from these crimes annually—some are domestic violence; that may be one of the highest categories—but the mental illness issue is not tangential. There are many crimes where people—and we are not going to solve this problem until we look it right in the face. Every

sheriff I represent across Northern Ohio, half the people in their jails are mentally ill, and most of them spend time in juvenile detention facilities as kids and they merely graduate into the adult institution as adults.

So, we are holding this population, through deinstitutionalization that they said didn't work back in the 1980s—everybody was released—and now we have got sick people at the juvenile level who are filling our juvenile detention facilities and then they just graduate and they go in the adult facility. So, this is how we are handling mental illness as a country.

So, the people, the casualties that are resulting from these individuals—Sandy Hook was another one, right—we act—we are all shocked and we all go home. And I am saying to myself that I think the data can really help us if we could assemble that. And I am very interested in where they got the gun. We know the Sandy Hook perpetrator got it from his mother. She was taking him to a shooting range and he was not stable—oh my goodness.

So, we have really work to do in this country, but I am asking, do you have the ability in your own agencies or with your colleagues across the federal government, to go back to 1998, start with the shooting right here, where did Russell Weston get his gun? Is that on the record somewhere? And then, what his diagnosis was, and then deal with the people over at NIMH and figure out what happened? How did this guy get through the net?

MASS SHOOTINGS

And do the same with these mass shootings across our country and enlighten the American people. I think that would be a great contribution. Do you have the ability to participate in that type of effort? Or lead it?

Mr. BRANDON. Ma'am, as I mentioned, when there is a mass shooting, ATF, FBI, and U.S. Marshal Service is going to respond. We have all come up with our roles, which we have been defining under the Deputy Attorney General's leadership. The ATF's mission is always follow the gun. We are going to learn to say, How did this person get the gun? Were any federal laws violated? Did anybody conspire to get this person the gun?

And I do believe that the FBI and even the Secret Service do a study looking back at saying, what is the historical nature?

I can tell you anecdotally—and my chief of staff is here—when I hear of these shootings I say, I bet the person purchased it in the last three to four months. They are not prohibited, but they have a mental illness. And I have been pretty good at just doing it. I am picking that up just going, Oh, my God, there is another tragedy, you know, and you mentioned Newtown. Everybody knows where they were. It is like the 9/11 tragedy when you hear about that.

But the other thing I have learned from talking with folks is that people that have mental illness, they are not violent, you know, a lot of them. So, it is really drilling down to which mental illness, because painting people with a broad brush can be unfair, because they can be victims of violence themselves.

So I think your question is well put, and also, I think the ATF, FBI had testified with a Secret Service representative—she was a Ph.D.—that would look into trends and shootings. So, it is some-

thing that I think there is information there that can answer your question and the FBI can get back to you on.

Ms. KAPTUR. I would really be grateful and we will try to put some language in a report.

Ms. HALVORSEN. Thanks.

MENTAL HEALTH AND FIREARMS

Ms. KAPTUR. Try to put some language in there to get that kind of—wouldn't that interest my other colleagues on this committee—on this subcommittee?

And I am not saying—I know the mental illness community resists this because they don't want to view the mentally ill as largely violent—and they aren't—but there is a subset, and it is like what do we do as a country to identify this possibility and avoid these casualties?

Ms. HALVORSEN. This is a very, very complex problem and it is something that is going to need a whole-of-government approach going forward on it. So, I appreciate you offering that up and following up with us on that.

And I will tell you on the JTTFs, the National JTTFs, we have been working very hard with Health and Human Services to get a Task Force Officer that is from Health and Human Services on the JTTFs, even if they are part-time, so that when we are going through our counterterrorism cases, we can actually review it through them if we think there may be some mental illness involved and figure out how we work through the process around that person. And how do we handle that case?

Do we have other tools in the toolbox, right, that we can actually help, instead of putting them in prison, are there other things that we can do to get them help? And they are the subject-matter experts on it; we are not, right, as law enforcement. We are not mental health professionals; they are.

And so, we are working with that on the counterterrorism investigations and I know they are trying to work through that on some of our criminal investigations, as well, but it is a step in the right direction, but it has to be a whole-of-government approach moving forward on this.

Ms. KAPTUR. Thank you, Mr. Chairman.

Mr. SERRANO. I want to thank you for joining us today. It is been very informative and we are on your side. We know the work that you need to do. We want you to do more of it. We want you to have the opportunity to do it better, as I am sure you want to improve on it, and as time goes on as we get this bill ready, we will keep that in mind and our conversations will continue.

So, thank you so much, and this meeting is adjourned.

[Whereupon, at 12:34 p.m., the subcommittee was adjourned.]

[CLERK'S NOTE: The Department did not respond with answers to submitted questions in time for inclusion in the record.]

TUESDAY, MARCH 26, 2019

NATIONAL SCIENCE FOUNDATION

WITNESS

DR. FRANCE A. CORDOVA, DIRECTOR, NATIONAL SCIENCE FOUNDATION

Mr. SERRANO. The subcommittee will come to order.

I would like to welcome NSF Director, Dr. France Córdova, to the subcommittee. Good morning.

The National Science Foundation is an independent federal agency charged with promoting basic research and education in science and engineering. In doing so, it is a major source of federal support for U.S. university research in the STEM fields. NSF's investments in STEM education help train the next generation of scientists and engineers. As you know, Dr. Córdova, I am a strong supporter of NSF and I believe that its programs help our Nation to be the world leader in major discoveries, innovations, and scientific breakthroughs.

The President's budget proposal for fiscal year 2020 requests \$7.06 billion for NSF, which is a \$1.01 billion, or 12 percent, decrease from the 2019 enacted level. Within the total, the President's budget also proposes \$5.66 billion for the Research and Related Activities account, which is a cut of \$858 million, or 13.1 percent below the current level. These proposed levels of funding endanger the core missions at NSF.

For example, if the requested amount is enacted into law, the number of competitive awards for fiscal year 2020 would go down from 11,600 awards in 2018 to 10,400. In a given year, NSF awards grants to over 1,800 colleges, universities, and other public and private institutions in 50 states, the District of Columbia, and Puerto Rico. Cutting funding for NSF will inevitably leave many schools without this much-needed education and research funding.

The President's budget blueprint for fiscal year 2020 also requests \$823.4 million in funding for the Education and Human Resources account within NSF. This represents a cut of \$86.5 million or 9.5 percent. The President's budget proposal would accomplish this decrease by cutting programs that increase STEM participation, including programs that help minorities. I will strongly oppose this and will work to make sure that minority-serving institutions receive robust funding for STEM research.

Another issue of importance to me is the Arecibo Observatory in Puerto Rico. The President's budget for fiscal year 2020 proposes a total of \$4.26 million for the Observatory from NSF's MPS and GEO accounts, which is a reduction of \$3.28 million from the fiscal year 2019 enacted level. I strongly support the Arecibo Observatory and its mission.

In short, NSF helps our economy grow, sustains our economic competitiveness, and enables us to remain the world leader in innovation. We will continue to work in a bipartisan manner to ensure that it is well funded.

Thank you once again, Dr. Córdova, for joining us today and I look forward to your testimony.

Now I would like to recognize my friend and ranking member, Mr. Aderholt.

Mr. ADERHOLT. Thank you, Mr. Chairman. And I just want to say that I think in light, everyone is a little disappointed to hear about your announcement yesterday regarding your retirement, and I just want to say it has been a pleasure working with you over the years. And of course you are a tireless advocate for not only your constituents, but also for all the things that we work for on this subcommittee and so many things on the Appropriations Committee overall.

So we will certainly miss serving alongside you in Congress, but wish you the best in the next chapter of your life.

Dr. Córdova, thank you for being here today, and it is an honor to have you here to discuss the National Science Foundation fiscal year 2020 budget. Looking at your resume, you have a commendable career and we appreciate your service.

As you well know as much as anybody, going back to 1950, the National Science Foundation has been successfully carrying out its mission to promote American science and engineering by supporting fundamental research and STEM education.

Furthermore, last year alone the National Science Foundation funded 11,700 research awards, supported over 380,000 teachers, scientists, and students. And this support is key, because research spurs innovation, innovation drives our U.S. economy, and enhances our national security. This allows the U.S. to make improvements technologically and to create new, thriving industries, spur job growth, and make the workforce more efficient.

Even in times of fiscal restraint, this committee has remained supportive of NSF's efforts to ensure that students, scientists, and universities have the funds they need to carry out their vital research.

This committee has also worked hard to ensure that NSF and of course all agencies under our jurisdiction are held accountable to remain and remain exceptional stewards of the taxpayer dollars. Of course, the fiscal year 2020 request for the NSF is what we are here going to be discussing today, and our goal today is to discuss the details of that request and gain a better understanding from you, Dr. Córdova, about the priorities for the coming year.

In particular, it would be good to hear about the proposal's impact on programs like EPSCoR; NSF's investment in advanced manufacturing, artificial intelligence, quantum information science; and the ongoing Antarctic Infrastructure Modernization for Science Construction Project. It will be important for this committee to understand how NSF plans to continue carrying out its mission in fiscal year 2020 to support basic research throughout the country, while having an increased focus on a group of long-term interdisciplinary research projects known as the Ten Big Ideas.

So, Dr. Córdova, with that, I look forward to your testimony. And, Mr. Chairman, I yield back.

Mr. SERRANO. Thank you, Mr. Aderholt.

Dr. Córdova, you are recognized at this time. We will hold you to 5 minutes, but please understand that your full statement will be inserted in the record.

Dr. CORDOVA. Thank you very much, Mr. Chairman, Ranking Member Aderholt, Congresswoman Meng, and all the members of the subcommittee and staff. It is really a pleasure to be with you today.

And, Chairman Serrano, let me also reiterate Mr. Aderholt's comments about your announcement yesterday. We are just so indebted to you for your service to the Nation. Thank you very much.

The President's fiscal year 2020 budget request for the National Science Foundation is \$7.1 billion. This request makes targeted investments in basic research within a constrained budget environment. The details of the budget request are laid out in my written testimony; however, I would like to take the next few minutes to highlight the value our agency has brought to the Nation.

In 2020, the National Science Foundation will celebrate its 70th anniversary. I have been thinking about this milestone. Every day, we interact with advancements that would not be possible without the National Science Foundation. I bet one of the first things we all did today was grab our mobile phones to read our emails, check the news, and check the weather. The touchscreen interface that we have become so accustomed to was developed by an NSF-funded scientist, as was the lithium ion battery that powers smartphones and laptops.

And that weather forecast you rely on to make decisions every day was made more accurate by Doppler radar, a product of Government-funded research, including NSF.

The barcodes that do everything from scanning goods at the grocery store to tracking our packages as they travel across the country, to getting us into airplanes, that technology was made possible by NSF-funded researchers.

You might use a GPS-based app to find your way around in a new city or to find an alternate route home in heavy traffic. In its early days, Qualcomm relied on SBIR funding from NSF to develop technology that changed the face of wireless communications globally.

Indeed, one of the wonderful things about basic research is that you never know where it might lead and whom it might benefit someday. A great example is how research in economics has saved lives by transforming our system of kidney transplants. Nobel Prize-winning, NSF-supported scientists used research into game theory to develop software that could match kidney donors with recipients more efficiently, speeding up a process where time is precious.

Sometimes basic research is criticized at first for seeming silly or wasteful or unworthy of federal resources. It is hard to imagine this today, but when linguist William Stokoe began to look at American Sign Language in the 1960s, NSF was criticized for supporting his work by those who did not appreciate sign language as a possible means of communication. However, his use of NSF fund-

ing to publish the Dictionary of American Sign Language revolutionized education for deaf individuals, improving the lives of so many.

Often, discovery requires persistence in the face of incredible odds. A century after Einstein predicted their existence and with 40 years of NSF support, the LIGO facility detected gravitational waves produced by the collision of two black holes. In doing so, a new era of discovery in astrophysics began.

This is the type of high-risk, high-reward research that NSF is uniquely charged with undertaking.

From Nobel Prize-winning work for interpreting the genetic code in its function and protein synthesis, to mapping the wheat genome, to making 3D printing a reality, NSF supports the discoveries and discoverers that keep the United States a global leader in innovation.

As we look towards celebrating NSF's 70th anniversary, I am focused on positioning the agency to continue this work so that my successors may come before this body and herald the next great breakthroughs.

That is why we developed NSF's Ten Big Ideas. The Big Ideas strategically focus on areas ripe for discovery, areas that will allow NSF and the Nation to continue to push into the frontiers of science. With other science agencies, we are positioning our Nation to continue to lead research in artificial intelligence and quantum information science.

We continue to invest in large research facilities that keep the U.S. at the forefront of discovery, building the world's most powerful solar observatory in Hawaii, for example, and that observatory will see first light this summer. We are investing in super computers, robotics, and advanced manufacturing. We will stimulate convergence across scientific disciplines to foster the type of integrated research needed to address our most pressing needs.

And, perhaps most importantly, we continue to invest in people. Discoveries don't happen without discoverers. We have to continue to light the imagination of the next generation, to nurture them as they find their way to the sciences; we have to ensure that we are reaping the benefits of our country's diversity, creating an environment free from all types of harassment, and supporting them in their academic careers.

Mr. Chairman, I would be remiss not to also thank this committee and you and your colleagues for the historic level of funding provided for NSF in fiscal year 2019. With that funding, we are making investments that keep America at the cutting edge of scientific discovery and keep Americans leading the world in scientific achievement.

Thank you for your time today and your continued strong support of NSF and our mission. None of the advancements I have described would be possible without Congressional support.

[The information follows:]



**Dr. France Córdoba
Director
National Science Foundation**

**Before the
Subcommittee on Commerce, Justice, Science and Related Agencies
Committee on Appropriations
United States House of Representatives**

**on
“National Science Foundation’s Budget Request for Fiscal Year 2020”**

March 26, 2019

Introduction

Chairman Serrano, Ranking Member Aderholt, and Members of the subcommittee, it is a privilege to be here with you today to discuss the President’s Fiscal Year (FY) 2020 Budget Request for the National Science Foundation (NSF).

Established by the National Science Foundation Act of 1950 (P.L. 81-507), NSF is an independent Federal agency whose mission is “to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes.” NSF is unique in carrying out its mission by supporting fundamental research across all fields of science, technology, engineering and mathematics (STEM) and all levels of STEM education. NSF is also committed to the development of a future-focused science and engineering workforce that draws on the talents of all Americans. NSF accounts for approximately 25 percent of the total Federal budget for basic research conducted at U.S. colleges and universities and has been vital to many discoveries that impact our daily lives and drive the economy. NSF is and will continue to be a respected steward of taxpayer dollars, operating with integrity, openness, and transparency.

A vibrant scientific workforce and breakthrough discoveries enabled by NSF investments sustain, accelerate, and transform America’s globally preeminent innovation ecosystem. A long-term vision, belief in the promise of fundamental research, and commitment to pursuing risky, yet potentially extraordinary discoveries are the hallmarks of NSF. NSF’s investments empower discoverers to ask the questions and develop the technologies that lead to the next big breakthroughs.

In FY 2020, NSF will continue to support the science, technology, innovation and workforce development that drives this Nation's economy, ensures the security of the American people, and guarantees the United States' place as a global power for generations to come. To achieve these goals, NSF will make strategic investments across the agency to support basic research, while putting an emphasis on convergence—interdisciplinary research that spans and integrates all areas of science.

NSF has made a strong commitment to agency-supported research infrastructure. In FY 2020, NSF is requesting \$1.089 billion for its major multi-user research facilities, including for construction in the MREFC account. Major NSF research facilities range from research stations in Antarctica, to a fleet of academic research ships, to a suite of world-leading telescopes. This research infrastructure is critical for delivering frontier scientific results such as detections of gravitational waves and supports the research of tens of thousands of U.S. scientists and students.

In addition, FY 2020 investments support several of the Administration's Research and Development Budget Priorities, including artificial intelligence (AI); quantum information science (QIS) research; advanced manufacturing; and microelectronics and semiconductors. These investments will strengthen the Nation's innovation base and contribute to unparalleled job growth, continued prosperity, and national security.

In FY 2020, NSF expects to evaluate approximately 46,100 proposals through a competitive merit review process and make approximately 10,400 new competitive awards, 8,000 of which will be new research grants and the remainder of which will be contracts and cooperative agreements. The number of new research grants decreases by roughly 11 percent from previous levels, in keeping with the overall change in total NSF funding. This process involves approximately 224,000 proposal reviews, engaging on the order of 32,000 members of the science and engineering community participating as panelists and proposal reviewers. In a given year, NSF awards reach over 1,800 colleges, universities, and other public and private institutions in 50 states, the District of Columbia, and U.S. territories. In FY 2020, NSF support is expected to reach approximately 348,400 researchers, postdoctoral fellows, trainees, teachers, and students, with 93 percent of the agency's annual budget used to fund research and education grants and research infrastructure in the science and education communities.

The President's Fiscal Year 2020 Budget Request

NSF's FY 2020 Budget Request is \$7.066 billion, a 9.6 percent decrease from the FY 2018 Actual level and a 12.6 percent decrease from the FY 2019 Enacted level. With this level of funding, NSF will support basic research across all fields of science and engineering that create knowledge while investing in priority areas like:

- Advancing NSF's Big Ideas - bold questions that will drive NSF's long-term research agenda;
- Accelerating focused, cross-disciplinary efforts that will have impact in a short timeframe around two of the Big Ideas: Harnessing the Data Revolution and the Future of Work at the Human-Technology Frontier.
- Research and Development Priorities such as AI and Quantum Information Science.
- Continuing the Antarctic Infrastructure Modernization for Science project; and
- Investing in two detector upgrades to operate at the High Luminosity-Large Hadron Collider (HL-LHC).

NSF's BIG IDEAS

Increasingly, collaboration and convergence are necessary to achieving our mission, especially in a world of constrained budgets. NSF continues to emphasize its 10 Big Ideas, research agendas that identify areas at the frontiers of science and engineering, which promise to be among the most transformative in the coming decade. Of the 10 Big Ideas, six are identified as research ideas. These are opportunities for researchers to make the discoveries that will shape the future of everything from quantum computing, artificial intelligence, and agriculture to space exploration and medical innovation. Each of these Big Ideas will be supported by an investment in dedicated activities for the Idea, as well as additional foundational investments from across the agency. The other four are Enabling Big Ideas, which endeavor to make science and engineering more interdisciplinary and reflective of the rich diversity of the U.S., while supporting investments in infrastructure and risky, high-reward science. New agency FY 2020 investment in the Research Big Ideas is \$180.0 million. For Enabling Big Ideas, the FY 2020 investment totals \$117.5 million. NSF's 10 Big Ideas are as follows:

Research Big Ideas:

1. ***Harnessing the Data Revolution for 21st-Century Science and Engineering (HDR)***—Engaging NSF's research community in the pursuit of fundamental research in data science and engineering, the development of a cohesive, federated, national-scale approach to research data infrastructure, and the development of a 21st-century data-capable workforce.
2. ***The Future of Work at the Human Technology Frontier (FW-HTF)***—Catalyzing interdisciplinary science and engineering research to understand and build the human-technology relationship, design new technologies to augment human performance, illuminate the emerging socio-technological landscape, and foster lifelong and pervasive learning with technology.
3. ***Windows on the Universe (WoU): The Era of Multi-Messenger Astrophysics***—Using powerful new syntheses of observational approaches to provide unique insights into the nature and behavior of matter and energy and to answer some of the most profound questions before humankind.
4. ***The Quantum Leap (QL): Leading the Next Quantum Revolution***—Exploiting quantum mechanics to observe, manipulate, and control the behavior of particles and energy at atomic and subatomic scales; and developing next-generation quantum-enabled science and technology for sensing, information processing, communicating, and computing.
5. ***Understanding the Rules of Life (URoL): Predicting Phenotype***—Elucidating the sets of rules that predict an organism's observable characteristics, i.e., its phenotype.
6. ***Navigating the New Arctic (NNA)***—Establishing an observing network of mobile and fixed platforms and tools, including cyber tools, across the Arctic to document and understand the Arctic's rapid biological, physical, chemical, and social changes, in partnership with other agencies, countries, and native populations.

Enabling Big Ideas:

7. ***NSF INCLUDES***—Transforming education and career pathways to help broaden participation in science and engineering.
8. ***Growing Convergence Research at NSF (GCR)***—Merging ideas, approaches, tools, and technologies from widely diverse fields of science and engineering to stimulate discovery and innovation.
9. ***Mid-scale Research Infrastructure***—Developing an agile process for funding experimental research capabilities in the mid-scale range, spanning the midscale gap in research infrastructure. This is a “sweet spot” for science and engineering that has been challenging to fund through traditional NSF programs.
10. ***NSF 2026 Fund***—Stimulating and seeding investments in bold foundational research questions that are large in scope, innovative in character, originate outside of any particular NSF directorate, and may require a long-term commitment. This Big Idea is framed around the year 2026, providing an opportunity for transformative research to mark the Nation’s 250th anniversary.

CONVERGENCE ACCELERATOR

In the FY 2019 Budget Request to Congress, NSF unveiled the Convergence Accelerator, a new organizational framework that stands separately from the NSF research directorates, with its own budget, staff, and initiatives. The Convergence Accelerator will be a time-limited entity focused on specific research topics and themes. Those topics and themes will reward high-risk, innovative thinking to accelerate the discovery and innovation that remains the priority of NSF. The Accelerator is intended to be a new way of achieving rapid lab-to-market outcomes.

In FY 2020, the Convergence Accelerator will focus on topics shared by two of the 10 Big Ideas. One Accelerator track will focus on Harnessing the Data Revolution for 21st-Century Science and Engineering, and a second will focus on the Future of Work at the Human-Technology Frontier. Each will be funded at \$30.0 million, plus each will seek to leverage \$20.0 million in external partnerships.

NSF’s support for the Big Ideas and the Convergence Accelerator reflects the agency’s ongoing commitment to advancing science at the frontiers, while supporting the core fundamental research that has advanced the Nation since the agency’s founding. Collaboration and convergence are required across NSF to achieve the agency’s mission and support the maximum number of researchers. Science and engineering today requires innovative approaches to leveraging resources across all fields of science.

RESEARCH AND DEVELOPMENT PRIORITIES

Basic research forms the core of NSF’s work and has led to discoveries and innovations that have been awarded hundreds of Nobel Prizes, and changed humankind’s conception of the universe and the known world. Basic research is responsible for advancing our knowledge of the universe, as well as innovations like high speed internet, nanotechnology, and advances in robotics that require understanding of the fundamental laws that govern the physical world. NSF

funds basic research in all the agency's directorates and continues to fund research that transcends single disciplines.

In FY 2020, NSF will make investments that support the basic research that advances human knowledge and makes tomorrow's innovations possible. Additional investments will support the advancement of AI, research in advanced manufacturing, and advance discoveries in QIS and semiconductors and microelectronics research.

Artificial Intelligence

AI is advancing rapidly and holds the potential to transform American lives through improved educational opportunities, increased economic prosperity, and enhanced national and homeland security. NSF will continue significant investment in AI with **\$492.0 million** in AI research in FY 2020. NSF supports fundamental research in machine learning, computer vision, and natural language processing, along with the safety, security, robustness, and explainability of AI systems; translational research at the intersection of AI and various science and engineering domains as well as economic sectors such as agriculture, manufacturing, and personalized medicine; and education and learning, including growing human capital and institutional capacity to nurture a next generation of AI researchers and practitioners.

Advanced Manufacturing

In FY 2020, NSF will invest **\$268.0 million** in Advanced Manufacturing and continue to support the fundamental research needed to revitalize American manufacturing to grow the national prosperity and workforce, and to reshape our strategic industries. NSF research accelerates advances in manufacturing technologies with an emphasis on multidisciplinary research that fundamentally alters and transforms manufacturing capabilities, methods and practices. Investments in advanced manufacturing include research on highly connected cyber-physical systems in smart processing and cyber manufacturing systems, and activities that develop new methods, processes, analyses, tools, or equipment for new or existing manufacturing products, supply chain components, or materials. NSF's investments are expected to enable new functionalities to increase the efficiency and sustainability of the production of the next generation of products and services. These developments will yield advantages such as reduced time to market, new performance attributes, improved small-batch production, cost savings, energy savings, or reduced environmental impact from the manufacturing of products.

Quantum Information Science

Research in QIS examines uniquely quantum phenomena that can be harnessed to advance information processing, transmission, measurement, and fundamental understanding in ways that classical approaches can only do much less efficiently, or not at all. NSF will invest **\$106.0 million** in QIS research and development in FY 2020, which strongly aligns with the Administration's priorities and the National Quantum Initiative to consolidate and expand the U.S.' world-leading position in fundamental quantum research and deliver proof-of-concept devices, applications, tools, or systems with a demonstrable quantum advantage over their classical counterparts.

Microelectronics

Research in semiconductors and microelectronics is critical to future advances and security in several areas, including information technology, communications, sensing, smart electric grid, transportation, health, and advanced manufacturing. NSF will support research to address

fundamental science and engineering questions on the concepts, materials, devices, circuits, and platforms necessary to sustain progress in semiconductor and microelectronic technologies. The FY 2020 investment of **\$68.0 million** will strengthen America's capabilities and capacity for revolutionary microelectronics design, architecture, and fabrication, as well as high-performance computing. New discoveries will enable the nation to overcome crucial scientific barriers for emerging technologies such as artificial intelligence, quantum technologies, and interconnected autonomous systems, and they will strengthen U.S. scientific leadership, economic prosperity, and national security.

MAJOR RESEARCH EQUIPMENT AND FACILITIES CONSTRUCTION

The FY 2020 Request includes funding to continue construction on two projects: the Large Synoptic Survey Telescope (LSST) and the Antarctic Infrastructure Modernization for Science (AIMS). Funding is also proposed for two detector upgrades to operate at the High Luminosity-Large Hadron Collider (HL-LHC).

The Large Synoptic Survey Telescope

The LSST will be an 8-meter-class wide-field optical telescope capable of carrying out surveys of nearly half of the sky. It will collect nearly 40 terabytes of multi-color imaging data every night to produce the deepest, widest-field sky image ever. It will also issue alerts for moving and transient objects within 60 seconds of their discovery. The FY 2020 **request of \$46.3 million** represents year seven of its nine-year construction funding profile.

The Antarctic Infrastructure Modernization for Science

In FY 2020 NSF **requests \$97.9 million** to continue to invest in the AIMS project, a necessity for maintaining U.S. scientific and geopolitical eminence across the continent of Antarctica. The AIMS project is the primary component of the McMurdo Station Master Plan, with a specific focus on the core elements of this critical logistics hub. AIMS will enable faster, more streamlined logistical and science support by co-locating or consolidating warehousing, skilled trades work, and field science support.

High Luminosity-Large Hadron Collider

The LHC is the world's largest and highest energy particle accelerator. Located near Geneva, Switzerland and operated by the European Organization for Nuclear Research (CERN), the LHC can accelerate and collide counter-propagating bunches of protons at a total energy of 14 tera-electron volts. A Toroidal LHC ApparatuS (ATLAS) and Compact Muon Solenoid (CMS) are two general purpose detectors used by researchers to observe these collisions and analyze their characteristics. In FY 2020, an investment of **\$33.0 million is requested** to begin upgrades of components of the ATLAS and CMS detectors that will enable them to function at much higher collision rates following an upgrade to the LHC to increase its luminosity. FY 2020 funding would represent year one of a five-year project.

Mid-scale Research Infrastructure

The Mid-scale Research Infrastructure project, an effort that will address a gap between small existing research infrastructure instrumentation and existing large facility funding, has a new, dedicated funding line in the MREFC account for which **\$45.0 million is requested in FY 2020**.

NSF will implement a high-priority, agency-wide mechanism that includes upgrades to major facilities as well as stand-alone projects, such that research infrastructure investments above \$20 million are managed as a portfolio. Individual projects will be selected through a dedicated program solicitation developed in FY 2019 and NSF's merit review process.

Daniel K. Inouye Solar Telescope and the Regional Class Research Vessels

NSF will continue to manage the construction of both the Daniel K. Inouye Solar Telescope (DKIST) and the Regional Class Research Vessels (RCRV) in FY 2020. FY 2019 represented the final year of funding for DKIST within an 11-year funding profile and completion of construction is planned for no later than June 2020. The FY 2019 appropriations for RCRV of \$127.1 will complete construction of three vessels. The RCRV project will help to satisfy the anticipated ocean science requirements for the Nation. The vessels are a major component in the plan for modernizing the U.S. Academic Research Fleet. Construction of three ships to support the anticipated demands for coastal oceanography in the Gulf of Mexico and the East and West coasts will minimize transits and maximize research time in each of these regions. NSF plans to fund the operations of three RCRVs without increasing current annual costs, which is a result of fleet right-sizing and modernization.

EDUCATION AND STEM WORKFORCE

At NSF, our education activities are integrated with science and engineering, research and innovation. We recognize that combining the best that we know from research about learning and cognition with exciting opportunities to learn STEM is a winning combination for helping to effectively inspire the next generation STEM skilled workforce.

NSF's education and STEM workforce investments are primarily housed in the Directorate for Education and Human Resources but represent agency-wide investments in the education of tomorrow's scientists, engineers, and educators. NSF is committed to the education and training of a workforce for the 21st century economy. This workforce must be capable of adapting to the increasingly technical nature of work across all sectors. NSF works to prioritize programs that will provide experiential learning opportunities, as well as programs that prioritize computer science education and reskilling. Priority STEM education activities to prepare America's future workforce in FY 2020 are:

The Graduate Research Fellowship Program

The Graduate Research Fellowship Program (GRFP) recognizes students with high potential in STEM research and innovation and provides support for them to pursue research across all science and engineering disciplines. GRFP fellows may participate in Graduate Research Opportunities Worldwide (GROW), which provides opportunities to conduct research with international partner countries and organizations, and Graduate Research Internship Program (GRIP), which provides professional development through research internships at federal agencies. The GRFP program will continue to align awards with NSF research priorities such as Big Data, AI, QIS, and NSF's 10 Big Ideas. In FY 2020, NSF will invest \$256.9 million in GRFP and support 1,600 new fellows.

Improving Undergraduate STEM Education

In FY 2020, \$93.1 million is requested for the Improving Undergraduate STEM Education (IUSE) initiative, which supports the development of the STEM and STEM-capable workforce by

investing in the improvement of undergraduate STEM education, with a focus on attracting and retaining students and on degree completion. The initiative funds the development and implementation and the related research and assessment of effectiveness. Directorates across NSF invest in this program to support the development of a workforce that will be able to handle the real-world challenges of a STEM career.

Advanced Technological Education

In FY 2020, **\$75.0 million** is requested for the Advanced Technological Education (ATE) program, which focuses on the education of technicians for the high-technology fields that drive our nation's economy. The program involves partnerships between academic institutions and industry to promote improvement in the education of science and engineering technicians at the undergraduate and secondary institution school levels. The ATE program supports curriculum development; professional development of college faculty and secondary school teachers; career pathways; and other activities.

CyberCorps®: Scholarship for Service

In FY 2020, **\$55.1 million** is requested for The CyberCorps®: Scholarship for Service (SFS) program, which supports cybersecurity education at higher education institutions. SFS also focuses on workforce development by increasing the number of qualified students entering the fields of information assurance and cybersecurity, which enhances the capacity of the U.S. higher education enterprise to continue to produce professionals in these fields to secure the Nation's cyberinfrastructure.

Robert Noyce Teacher Scholarship

In FY 2020, **\$47.0 million** is requested for the Robert Noyce Teacher Scholarship program, which seeks to encourage talented STEM majors and professionals to become K-12 mathematics and science teachers through funding provided to institutions of higher education towards scholarships, stipends, and programmatic support.

Louis Stokes Alliance for Minority Participation

In FY 2020, **\$46.0 million** is requested for The Louis Stokes Alliance for Minority Participation (LSAMP) program, which assists universities and colleges in diversifying the nation's STEM workforce by increasing the number of STEM baccalaureate and graduate degrees awarded to populations historically underrepresented in these disciplines.

Computer Science for All

In FY 2020, **\$20.0 million** is requested for Computer Science for All (CSforAll) to build on ongoing efforts to enable rigorous and engaging computer science education in schools across the Nation, to prepare the STEM workforce of the future. CSforAll aims to provide high school teachers with the preparation, professional development, and ongoing support that they need to teach rigorous computer science courses and to give preK-8 teachers the instructional materials and preparation they need to integrate computer science and computational thinking into their teaching.

ADVANCE

In FY 2020, **\$18.0 million** is requested for the NSF ADVANCE program, which increases representation and advancement of women in academic science and engineering careers, thereby contributing to the development of a more diverse science and engineering workforce. ADVANCE is an integral part of the NSF's multifaceted strategy to broaden participation in the STEM workforce and supports the critical role of the Foundation in advancing the status of women in academic science and engineering.

Hispanic Serving Institutions

In FY 2020, **\$15.0 million** is requested for the Hispanic Serving Institutions (HSIs) program to continue to enhance the quality of undergraduate STEM education at HSIs and to increase retention and graduation rates of undergraduate students pursuing degrees in STEM at HSIs. In addition, the HSI Program seeks to build capacity in undergraduate STEM education at HSIs that typically do not receive high levels of NSF grant funding.

Historically Black Colleges and Universities Excellence in Research

In FY 2020, **\$10.0 million** is requested for the Historically Black Colleges and Universities Excellence in Research (HBCU-EiR) program to support projects that enable STEM and STEM education faculty to further develop research capacity at HBCUs and to conduct research.

CONCLUSION

The FY 2020 President's Budget Request for NSF represents a \$7.066 billion investment in strengthening the nation's economy, security and global leadership through research in cutting-edge science and engineering and investments in STEM education and the future workforce. At this proposed level of funding, NSF would continue its work supporting research that advances national priorities such as growth in manufacturing, defense, and cybersecurity.

Over 50 percent of America's economic growth of the past 50 years is attributable to technological innovation. This innovation depends on significant investment in basic research. NSF had a role in the development of important advances such as the Internet, 3-D printing, and cell phones, and in responding to national and international crises. Since its creation by Congress in 1950, some 236 Nobel Prize winners have, at some point in their careers, been supported by NSF.

The discoveries and innovations funded by NSF have a long record of improving lives and meeting national needs. With the support of this Committee and the Congress, NSF will continue to invest in the fundamental research and the talented people – the discoveries and the discoverers – who improve our daily lives and transform our future.

Thank you for the opportunity to testify today and for your continued support of NSF. I will be pleased to answer any questions you may have.

Mr. SERRANO. Thank you. Thank you so much for your testimony.

NSF BY THE NUMBERS

Director Córdova, the Administration's fiscal year 2020 budget request is a significant reduction of \$1.1 billion below the fiscal year 2019. Can you tell us how many fewer research grants will be awarded and how many fewer graduate fellowships?

Dr. CORDOVA. Yes. If I do the math that both you and Mr. Adersholt just mentioned—you mentioned that we would be funding about 10,400 grants this year, and he mentioned that we were funding 11,700 grants in fiscal year 2018—then that is about 1,200 to 1,400 fewer grants overall with this budget.

As for the graduate research fellowships, our 2020 request is for funding 1,600 graduate research fellowships; in fiscal year 2018, we funded 2,000.

Mr. SERRANO. How many?

Dr. CORDOVA. Two thousand new ones last fiscal year and we can fund 1,600 new ones in fiscal year 2020, so 400 fewer.

Mr. SERRANO. Significant decreases.

What other reductions will your budget request, if enacted, result in?

Dr. CORDOVA. Pardon me?

Mr. SERRANO. What other budget reductions—if your budget request is enacted—

Dr. CORDOVA. Yes.

Mr. SERRANO [continuing]. What other reductions will take place?

Dr. CORDOVA. As was mentioned, the budget is reduced about 12 percent from previous levels and that is a reduction in just about all of our programs. A few we have kept at the levels of fiscal year 2018, but basically the answer is that just about all of our programs will see some reductions.

Mr. SERRANO. For several years now, not all of the NSF programs to expand participation of groups traditionally under-represented in science have been held flat; your budget request cuts many of these programs. How much of the demand do these programs meet?

Dr. CORDOVA. It is all about capacity, Chairman. With additional investment, we can fund more programs; more need is there. Every year, we leave about \$4 billion—and that is at a total funding level of around \$8 billion—we leave about \$4 billion's worth of good proposals on the cutting room floor, and those are proposals that are rated very good to excellent.

With the recent—just as one concrete example—with the recent call for mid-scale proposals, those are proposals for instrumentation facilities in the range between a few million dollars, what we call our major research instrumentation program is below that, and the major facilities, which cost over \$100 million, we received \$4.7 billion in proposals just for that one opportunity from several hundred people. So there is enormous demand out there.

Whatever our budget is, NSF will fund the best possible research. We have this amazing merit review process that is the gold standard, and it will judge which are the top proposals.

Mr. SERRANO. Yeah, I am concerned about that, because just in your opening statement you listed so many wonderful things that have been done, and you even listed the fact—you commented on the fact that some people might not have approved at the time and thought it was perhaps a waste of money or something and yet it turned out to be wonderful. So we worry that these cuts are really harming our future.

Look, I know that budgets are tight at times, but there are certain areas that should not take heavy cuts because they make life better for all of us and keep our country where it should be.

BROADENING PARTICIPATION PROGRAMS

Let me ask you, what are the major gaps in participation that NSF does not have programs to address? Are there areas missing still?

Dr. CÓRDOVA. When I came to NSF 5 years ago, I was very concerned about broadening participation, and I looked carefully into NSF's programs for that. We do spend a lot of money on broadening participation. That is part of our mission to encourage people of all ages to have access to STEM education—young people in particular to want to become scientists and engineers—and to supply the next generation with the types of discoveries I talked about.

I was concerned that we are still not moving the needle. We still have a large, untapped group of people, women and minorities, who don't have access or encouragement in science and engineering. And so I looked at the programs we have and asked if there some things that we should stop doing? Should we change the way we are doing things? And I found that the programs that are doing broadening participation are very good programs. There are excellent programs in different parts of the country with different kinds of missions; some are directed towards students and provide them scholarships.

One great example is the Hostos Community College program in the Bronx, which you know about. It is such an important program to get students the capacity, the knowledge, to then go on to a 4-year program like the Grove School of Engineering at CUNY.

But we still had gaps in that and we still really need to move the needle on participation of everybody, so we started the INCLUDES Program. The INCLUDES Program is one of our Big Ideas and it is funding programs, 70 or more now, all across the United States in different areas, and the whole goal of it is to increase the representation of women and minorities in particular in STEM education. And this program now is really a network of networks. We have the different pilot programs grouped into alliances around the country. And now we have a backbone organization that is run by SRI; they are doing evaluation and assessments of the programs, and they are networking all the investigators together. Because, Chairman, the basic challenge is how do you scale really good ideas, how do you make them scalable so that the whole country can understand that these are good models to replicate? And that is what the INCLUDES Program is really trying to do that hasn't been done much before.

Mr. SERRANO. Thank you.

Let me just touch on one subject area before I turn—one further subject area before I turn it over to the ranking member.

ARECIBO OBSERVATORY

The Arecibo Observatory is the second-largest single-dish radio wavelength reflector and has been in service since 1963. Although multiple agencies perform research at the Arecibo Observatory, NSF's Division of Astronomical Sciences has the longstanding responsibility for basic site maintenance and upkeep. We provided \$16 million in disaster relief funding to repair and upgrade this facility because of Hurricane Maria. Can you give us an update on the status of the repairs at the observatory?

Dr. CORDOVA. Yes. In fact, I am going to Puerto Rico next week just to see how they are doing there and to check in on the observatory, and also to talk with universities like the University of Puerto Rico and its campuses.

And I actually have used Arecibo data in the past. I am an astrophysicist; this is my line of work and research. We spent about \$2 million of that \$16 million to date starting on the repairs. We have asked OMB and Congress to approve a 5-year spend plan so that we could, in an orderly fashion, address everything that we needed to address in terms of repairs and modest upgrades to this facility.

So we very much appreciate that much-needed money for the upgrades. It is just an outstanding facility that has made amazing discoveries, including Nobel Prize-winning discoveries.

Mr. SERRANO. And, with that in mind, over many decades the Arecibo Observatory has produced some valuable scientific research and discoveries. That is why I believe that the Federal Government should maintain ownership of this facility, even if it is administered and run by an educational institution or a private party.

You will commit to not transfer the title of the observatory to a private party?

Dr. CORDOVA. We have no plans to transfer the title in fiscal years 2019 and 2020. I think you know that the whole discussion about title transfer was something that was surfaced by the management entity, the University of Central Florida; that has been of interest to them, but we have no plans to do that in the next two fiscal years.

We are hopeful that the University of Central Florida will engage other partners, as they have committed to do, to be part of funding the Arecibo Observatory. We know that NASA has upped its commitment to \$4.65 million, and we have also given a grant to Brigham Young University to build a receiver that costs on the order of \$5 million, a new receiver that will open up new capabilities for the observatory. And so we continue to fund assets that will help the observatory.

Mr. SERRANO. You will know that the answer is, while I am still in Congress, it is OK. So you guys get ready, all right? No, I think we have a lot of friends who support the observatory.

Mr. Aderholt.

ESTABLISHED PROGRAM TO STIMULATE COMPETITIVE RESEARCH (EPSCOR)

Mr. ADERHOLT. Thank you, Mr. Chairman.

Traditionally, Dr. Córdova, the distribution of NSF research dollars has not been uniform cross the country, but the Established Program to Stimulate Competitive Research, commonly known as EPSCoR, helps to address this problem. Of course, EPSCoR promotes scientific progress nationwide by strengthening research capacity and competitiveness at universities in particular states. So, last year alone, Alabama received over \$14 million through EPSCoR to stimulate competitive research.

Unfortunately, in the fiscal year 2020 request EPSCoR is reduced by \$24 million from the fiscal year 2019 enacted level. The last time the EPSCoR was funded at a similar level was back in fiscal year 2012.

I just wanted to get your opinion of what the rationale would be in reducing this important program?

Dr. CORDOVA. The EPSCoR program is an extremely important program, and I have been to many EPSCoR states. I actually live in an EPSCoR state. New Mexico is my home, and I have been able to see firsthand the amazing things that are being done to raise capacity, research infrastructure, and research itself in the EPSCoR states.

The EPSCoR funding is formulaic; it is by congressional design. And so when our budget goes up, the EPSCoR funding goes up in line with—it is like an index fund, it goes up with our total budget and, when it goes down, it goes down according to the formula. So it is exactly the amount that we have proposed in 2020 is according to the formula as set out by Congress.

Mr. ADERHOLT. But at this level what would be the impact on states like Alabama that, you know, have a lot of institutions that rely on these funds to build the capacity they need to compete nationally?

Dr. CORDOVA. The need for research investment is great in EPSCoR states. It is great throughout the country. It is just, as I said earlier, a matter of capacity. With increased investment, we can fund more. But whatever investment we have, we will always use it very wisely. We will fund the very best possible research and that includes in Alabama.

ADVANCED MANUFACTURING

Mr. ADERHOLT. Of course, manufacturing is a key industry in Alabama and, of course, in many states. I am very supportive of any efforts that create additional jobs and opportunities for manufacturers throughout the country. I was pleased to see that the fiscal year 2020 request includes \$268 million to revitalize American manufacturing.

Can you take a moment just to explain how this research investment will help the manufacturing industry grow and flourish? And also how it could potentially help our American manufacturers to be more competitive with foreign entities?

Dr. CORDOVA. Yes. Well, this is of course a priority of the Administration, and it has been a priority of the National Science Foundation for a long time. We have no fewer than four of our directorates involved in funding programs in advanced manufacturing, which, as you know, is a very broad topic. Our Computer and Information Science and Engineering Directorate, our Biology Direc-

torate, our Math and Physical Sciences Directorate, and of course our Engineering Directorate all fund programs in advanced manufacturing. And this is everything to do with the smart work force of the future.

One of our Big Ideas, and you mentioned those, Mr. Aderholt, in your remarks, is called the Future of Work at the Human-Technology Frontier. And in order to fund the best possible research that will impact what the future of work looks like, we are going to have to have smarter machines and smarter approaches in order to help the worker.

And so I have been able to see the progress of this Big Idea and the kinds of investments we are making. I have seen some recent examples that have to do with the factory floor in enabling humans and individuals to have additive manufacturing, and things like virtual reality and robotics to assist them in doing jobs that they couldn't possibly do all by themselves. It is really very inspiring to see the kinds of work that we are funding in advanced manufacturing.

MR. ADERHOLT. How do you or how will you ensure that all areas of the country benefit from these investments in the manufacturing sector research?

DR. CORDOVA. The same way we do with all of our programs. Our calls for proposals are open to the entire country and we have an emphasis on advanced manufacturing, we have an emphasis on the American worker. I am a member of the President's National Council for the American Worker, and there our main subject is skilling and re-skilling of the American workforce.

And for NSF, there are two main programs where we do that. One is our Advanced Technological Education Program, which is in many, many community colleges throughout the country, and people are welcome to take courses in learning all sorts of technology occupations. I visited some of those sites and it is absolutely amazing the kinds of projects that are going on in our community colleges, the equipment that they have to train people, and the quality of their faculty to teach them.

So that is one of our programs. And we keep putting, with the graciousness of Congress, more money into the Advanced Technological Education Program.

Then we have a number of other programs. For example, our Convergence Accelerator that we are just now starting, we put out the first call for the accelerator projects last week. And these are all projects that welcome everyone from around the country to conceive ideas to accelerate research in three main areas; one of those is big data, but the other two are in re-skilling and up-skilling the workforce and matching the workers to the work. And so we are very excited about seeing the results of those, and we think that that is going to be a big push. We are asking for proposals on a short time scale, and we are hopeful that they will achieve outcomes within the next couple of years. We think this could be a real game-changer.

MR. ADERHOLT. Thank you, ma'am.

MR. CHAIRMAN.

MR. SERRANO. Thank you.

We will now begin our first round for members, adhering to the 5 minute rule.

Mr. Cartwright.

DEVELOPING A ROBUST SCIENCE AND TECHNOLOGY WORKFORCE

Mr. CARTWRIGHT. Thank you, Mr. Chairman, and thank you to our distinguished witness for being here today.

I want to start by talking about a 2018 New York Times article by Dr. Maria Zuber, the former Chair of the National Science Board and Vice President for Research at MIT. She expressed deep concern about our Nation failing to make necessary investments in research, in graduate education, in training, to produce the knowledge and workforce that we need to compete with the investments being made by China and other nations.

Dr. Zuber explained that China's spending on research and development has grown by an average of 18 percent every year, while the U.S. is spending just by 4 percent. The potential consequence of this funding disparity, among others, is that China now claims more than 200 of the fastest supercomputers, while the United States has fewer than 150.

Dr. Zuber concluded, quote, "We cannot continue to advance the frontiers of knowledge and lead the world in innovation without funding for students and equipment, and when the only long-term federal commitment is to fiscal uncertainty," unquote.

Even President Trump is quoted as saying in the U.S. National Securities Strategy Report that, quote, "Losing our innovation and technology edge would have far-reaching negative implications for American prosperity and power."

My first question for you is, what is the consequence of an inability to compete with China and other nations when it comes to science and technology? In layman's terms, what happens to the U.S. if we don't have a robust science and technology workforce?

Dr. CORDOVA. We clearly need a robust science and technology workforce. This is a competitive world in which things are changing very rapidly, Mr. Cartwright, and that is why NSF cares so very much about its investment in the best possible research. That is one of the reasons that we stepped up with a new strategy called NSF's Ten Big Ideas. They are addressed towards what are the pressing needs of the country, whether it is in quantum information science or artificial intelligence, advanced manufacturing in 5G, and clearly broadening participation in STEM education. There are many, many needs of our country and we have to be competitive in all of those.

And so we will do our part. I co-chair three of the six committees of the National Science and Technology Council that are really moving ahead as part of the Administration and all of the executive branch agencies to do our best to be competitive.

Mr. CARTWRIGHT. Well, I think it is obvious that NSF recognizes that its funding supports research that is a primary driver of economic growth in this country.

According to Nobel Prize winner and MIT economics professor Robert Solow, since World War II, half of American economic growth can be traced to advances in science and technology. Our investments in NSF will produce real family-sustaining jobs.

VALUE OF BASIC RESEARCH TO ECONOMIC GROWTH

The question is, how do you explain how NSF funding drives economic growth?

Dr. CORDOVA. The NSF funding is mainly about funding fundamental research that is at the basis of technology and innovation. Without making the fundamental discoveries, you then can't go to application and outcomes.

I mentioned in my opening remarks several examples of where fundamental research, whether it is in communications or any form of research, physics, chemistry, or materials, has led to amazing technology. And one example I gave had to do with our cell phones and our laptop computers. Sure, Apple put them all together, but it had to have the ingredients, and we make the ingredients. There are several technologies that are involved, for example, in cell phones and every single one of them, when you look at them in detail, was first funded by a government agency and several of them by the National Science Foundation.

So, if we don't press on doing the fundamental research, then we will have nothing left to invent applications for, to put things together, and create the technologies of the future. When I go into a hospital, I just marvel because I know that NSF research is at the foundation of so much of the equipment that is used on me as I am examined. When people try to understand better, predict what various things that I have, what is going to be their outcomes, it is because of fundamental research that we have the equipment that we do in hospitals, in our cars and airplanes, and so forth.

Mr. CARTWRIGHT. Well, my last question then is, with this kind of gargantuan return on investment in NSF funding, why would anyone in the world want to cut NSF funding given that its funding drives our economy, enhances our national security, and advances this Nation's leadership globally?

Dr. CORDOVA. We are grateful to Congress for giving us a historic budget for fiscal year 2019 of \$8.1 billion; I can thank you for that.

Mr. CARTWRIGHT. Well, this fiscal year 2020 budget proposal for NSF puts the agency back to where it was in fiscal year 2012. That doesn't sound like much of an investment in the future. We have to invest in the future in areas like, as you mentioned, artificial intelligence and quantum computing.

This committee has made it clear year after year that we do not support Draconian cuts in the NSF budget, despite this Administration proposal.

Thank you, and I yield back.

Mr. SERRANO. Thank you.

Ms. Meng. I'm sorry, Mr. Palazzo.

Mr. PALAZZO. Thank you, Mr. Chairman.

Director Córdova, thank you for being here today. It is good to see you again. I think the last time we had you at our hearing was in 2017. Well, it is a shame we didn't have a chance to hear from you last year.

ENGAGING WOMEN AND MINORITIES IN STEM FIELDS

I want to speak with you today about STEM management, particularly those programs geared towards women and the under-

served communities. My time serving as chairman of the Space subcommittee taught me the importance of STEM programs and the President's budget proposal reduces the funds available for you to engage women and minorities.

So my question is, how are you planning to provide opportunities for those interested in STEM fields?

Can you discuss how this budget request affects programs like the PBS program SciGirls, and the Computer Science For All Program?

And, third, has the ADVANCE program increased women's participation in science and engineering fields? And anything else you would like to add.

Dr. CORDOVA. Well, thank you very much for those questions. As you can imagine, those are close to my heart.

I was a young girl once who wanted to be a scientist, and I didn't have the encouragement from family or teachers, because the vision of what a scientist was looked very different from me. In fact, when I was NASA's Chief Scientist, my first day in the office, a senior official came in to me and he said jokingly, but he said, "you don't look like a chief scientist", because we have these pre-conceptions. And so that is something that we really want to change through programs like—you mentioned a couple, SciGirls, which is on television in a lot of places, and the ADVANCE Program. We are trying to make an impact through other things like our sexual harassment policy that moves to reduce harassment, which can be a barrier to advancement for women, and to participation and engagement.

So at Purdue University, when I came in as president, we were just submitting the proposal for the ADVANCE program, our first. I was the principal investigator for that, so for almost the whole time I was there I led that program at Purdue University. And there our special effort was to advance in particular minority women, Hispanics and African-American women, through the professoriate.

And so I know, because I have been there firsthand, that these programs really can make a difference.

My inspiration, if you were to ask me how being a young person without a family and teachers that were motivating, it was from just a program very much like SciGirls; it was a program on television. This one happened to be about neutron stars that also convinced me to become an astrophysicist. These informal education programs, as well as the more formal programs like the ADVANCE program, which insists on institutional commitment to really rectify a situation and make it possible for those pathways to be open to women, are just so very important.

So I am really proud that NSF has the diversity of programs with a diversity of ages for entering into the programs. It hits young girls, middle school girls, and it hits women in the professoriate.

Mr. PALAZZO. Well, thank you, Director Córdova.

And I yield back.

Mr. SERRANO. Ms. Meng.

Ms. MENG. Thank you, Director, for being here today, and Mr. Chairman and Ranking Member, for holding this meeting.

I want to echo the concerns that have been mentioned by the chairman, by Mr. Palazzo, about encouraging STEM—building a STEM workforce, especially for those from minority communities. I know we’ve talked about cuts of funding to programs like historically black colleges and universities’ undergraduate program, tribal colleges and universities’ program, for example.

I wanted to specifically ask, I know you talked about your work at Purdue for African-American and Latino women, but I wanted to know about Asian-American and Native American Pacific Islander-serving institutions. This program provides grants and other forms of assistance to institutions to expand their capacity to serve this community. I notice that NSF’s budget does not have dedicated funding streams for these institutions. Can you explain how NSF currently funds these institutions and reaches out to the AAPI community?

Dr. CORDOVA. Our programs are open to all and we have a relatively new program over the last few years called INCLUDES. There are about 75 projects all over the country and some of them have that particular goal. They can have all sorts of goals of broadening participation. And the whole idea there is that they are networked into each other so that they can share best practices and so the whole effort of broadening participation can scale up. So that is one way that we do it.

And we have many programs like Computer Science For All, our Discovery Research for Pre-K through 12 programs, our REU programs, our graduate research programs for graduate fellows, all of which welcome the populations that you are talking about. Even though we don’t have a specific program, we do have programs where we welcome the diversity of the population to join them.

Ms. MENG. Wonderful. If we can ever collaborate in any way, especially in my home state of New York, please feel free to let me know.

QUANTUM INFORMATION SCIENCE

I wanted to talk about a field that you mentioned, quantum information science, which is a whole new field. There is a race in this field to develop and retain talent. We can have the best plans and long-term strategy for quantum research, but if we don’t grow this talent in our country, we will be left behind. I’m told by industrial researchers that you cannot just take engineers or physicists and teach them quantum engineering, that it’s a whole separate and new field.

What is the Administration doing to develop the workforce necessary to meet our industry needs for quantum-trained talent? I know that some applications may be several years away, so how can we retain the talent we developed? And can the NSF DOE centers that were authorized in H.R. 6227 help develop this talent needed?

Dr. CORDOVA. The answer to all those questions is yes.

There is a very vigorous effort on the part of this Administration to step up our efforts and investment in quantum research, and even a few years ago, NSF stepped up with one of its Ten Big Ideas called “The Quantum Leap.” And so we have been funding at NSF quantum sciences, quantum research for decades, and in fact NSF

funded 31 Nobel Prize winners who won for specific quantum inventions and discoveries.

We are a part of the group in the National Science and Technology Council that worked with the White House to put together a strategic plan under OSTP's leadership for quantum information science, and that plan was put out just a short while ago. That plan also calls for—and the congressional language, because Congress, of course, passed their quantum initiative, which is just great—it called for OSTP to lead in an effort to really get us to the next level. And so there is a group that has been formed in OSTP under Jake Taylor's leadership and NSF has contributed members to that, as have other agencies.

So this is really top of mind for all of us agencies working together, quantum. And as for young people, part of the quantum strategic plan actually specifically addresses raising a quantum workforce, and what is needed is investments at a very young age. Just as we are trying to get all students to think more computationally and to be computer literate, we also want them to be quantum literate. And there are professors in our universities and faculty in many places who believe that very young people can learn quantum principles.

And quantum physics was one of my favorite subjects in graduate school and just like anything else, like calculus, if you learn it at an early age, it is new enough and different enough, it is like learning another language, and it is actually quite fun to put yourself in that space. There are those of us who really believe that you can learn the principles of quantum science and computer science, which are inextricably linked through quantum information science, at a very young age.

Mr. SERRANO. Thank you.

Mrs. Lawrence.

Mrs. LAWRENCE. Thank you, Mr. Chair, and thank you for being here.

DEVELOPING AN ETHICAL FRAMEWORK FOR ARTIFICIAL INTELLIGENCE

On February 27th, I introduced a resolution, H.R. 153, to encourage the ethical development of AI. How do you plan on incorporating ethical and social studies into the AI research NSF supports?

Dr. CÓRDOVA. Thank you, Mrs. Lawrence, Congresswoman Lawrence, for your leadership on this. Having an ethical framework for artificial intelligence is extremely important.

As you know, artificial intelligence is a very broad collection of approaches, and it promises all sorts of opportunities, but also a lot of challenges. So what NSF is doing to help provide leadership in this area—and it is leadership that is, frankly, coincident with the Administration's plan for this country to be a leader in artificial intelligence—is to fund some specific proposals that have to do with ethics and bias, fairness and transparency, and accountability and explainability in artificial intelligence.

We released just a short while ago, a few months ago, a call for proposals from our Computer and Information Science and Engineering Directorate, working with our Social, Behavioral, and Economic Science Directorate and an entity called the Partnerships for

Artificial Intelligence, which is a collection of about 50 industries, foundations, and nonprofit organizations. All of us are working together to request proposals from the community at large that deal with these very important subjects.

In addition, our computer science branch is working with Amazon and we just signed a memorandum of agreement to develop proposals and fund research on fairness in artificial intelligence.

We are fast becoming a real leader in this area and it is just incredibly important that at the outset of doing new research that you also incorporate things like bias and fairness, and accountability and transparency. So I am really glad we are pursuing this.

ARTIFICIAL INTELLIGENCE SAFETY RESEARCH

Mrs. LAWRENCE. How is NSF prioritizing research funding to address safety problems?

Specifically, there are particular AI safety research questions you hope to address in the future research, such as about reducing unsafe exportation by AI systems. What is your feeling on the safety?

Dr. CORDOVA. Well, safety is incredibly important, and the programs that I just mentioned will also be welcoming proposals in this area. Safety is an extremely important part of all research and particularly in artificial intelligence.

So one of our Ten Big Ideas is on the Future of Work at the Human-Technology Frontier. This is about machine learning and robotics, artificial intelligence in general, helping the worker to have a safer work environment, and to augment human capabilities so that we leave individuals free to work in a healthy, safe environment to do the creative things, and the robots and machines are doing the things that are more dangerous, that are heavier, et cetera.

So safety is all part and parcel of the basic research that we do.

EVALUATION AND ASSESSMENT

Mrs. LAWRENCE. My last question. You are saying all of the right things when it comes to STEM, when it comes to inclusion of women and minorities; however, how do you monitor success? Have you set internal goals that says that we want to have what percentage of impact of improvement? Who monitors that?

And my concern is that—and I have seen it where someone will talk about a wonderful plan, but no one monitors it and there are no specific goals. What are your goals as related to increasing those in the workforce?

Dr. CORDOVA. Congresswoman Lawrence, I am a person who is not fond of saying that was a great question, but I will say it this time, that is a great question.

So I too was very concerned when I first came to NSF, now 5 years ago, about evaluation and assessment of our programs. And we have been funding through our merit review process, which is an amazing process that identifies great research. We have been funding spectacular work, but how do we assess and evaluate it? And how do we then transfer that knowledge to others, so that they can replicate it and so that it is scalable, so that everybody can take advantage of what we have just invested in?

So we are changing things up. Our INCLUDES program, which is one of our Ten Big Ideas, is a great example of that. In the INCLUDES program, we insist as part of the proposals that people have identified what are the goals and what are the metrics to achieve those goals. And then we hired a backbone organization, SRI—they are our first backbone organization—which is charged with making sure that those are done and then coming up with overall evaluation and assessment schemes, so that we can sit or stand before a body like this one and say that, for that program, here is what we set out to achieve, here is what we did achieve, this is why it is important, this is what is replicable about it, and this is how we would scale it.

So I couldn't agree more. And that goes way beyond any specific program; that has to do with all of our programs. We do have an Evaluation and Assessment Office—it is within our Office of Integrated Activities—and they are charged with doing evaluation and assessment of specific programs. But we haven't yet achieved a goal that I would like us to achieve: that every single program, whether it is the INCLUDES program or anything, has built within it a framework for metrics for evaluation.

So you have hit on something that is very close to me and I am committed to seeing that idea furthered, you know.

Mr. SERRANO. In other words, that was a great question. [Laughter.]

Mr. Crist.

Mr. CRIST. Thank you, Mr. Chairman. And thank you, Dr. Córdova, for being with us today.

HARMFUL ALGAE BLOOMS

I appreciate that the National Science Foundation is working to tackle issues of scientific and societal importance through the Ten Big Ideas. However, there are a lot of other societal issues important to my district, like harmful algae blooms, climate change, and civil rights, that are not included in the big ideas.

Considering that the agency's budget proposes a top-line cut of almost 12 percent, while also investing more money in the Big Ten, what are you going to do to make sure that the NSF continues to support research to address issues that are not included in the Big Ideas?

Dr. CÓRDOVA. Well, that is a great question too——

Mr. CRIST. Thank you.

Dr. CÓRDOVA [continuing]. Because I come from a Big Ten institution, Purdue University——

Mr. CRIST. You are a Boilermaker.

Dr. CÓRDOVA [continuing]. And, as you know, there are more than ten members of that. So there will be more than ten members of the Big Ideas pretty shortly.

One of the big ideas is called NSF 2026, and it is called 2026 because the year 2026 will be the 250th birthday of our country. We thought it would be great to have a whole suite of new Big Ideas ready for investment by that time, so we set on that goal. We sent out a call last summer for new Big Ideas to everybody in the Nation, everybody that is greater than 14 years old, because for some

legal reasons you can't be younger than 14 because it comes with a monetary prize.

So we had all those proposals in as of the end of October and they are being evaluated. There are many, many hundreds of those proposals. They are being evaluated internally right now, and we expect to make an announcement on the winners, who will also be asked, some subset of them, to produce videos and all. We want to make it a very public thing that the public can have this opportunity to suggest Big Ideas that are appropriate and fundable for the National Science Foundation. So we intend to have a big splash on that.

RAPID AWARD MECHANISM

Your more specific mention of things like algal blooms, these are incredibly important to the National Science Foundation also and we have other programs, like our RAPIDS Program. RAPID is an acronym, but what it really means is that you, if you are interested in something that just happened, a disaster, a tornado, an earthquake, hurricanes, algal blooms, infectious disease, you can propose to attack that problem immediately and you don't have to wait 6 months to be funded, you can be funded within just a few weeks' time. That is called our RAPIDS Program initiative.

We also have one of our Big Ideas, called Navigating the New Arctic, and there are algal blooms in the Arctic going on as well and so that is another opportunity for research funding.

Mr. CRIST. Thank you.

The RAPIDS Program you mentioned, I'm curious, what is the level of funding that is available there presently?

RAPID RESPONSE RESEARCH (RAPID) AWARDS

RAPID is a type of proposal used when there is a severe urgency with regard to availability of, or access to, data, facilities, or specialized equipment, including quick-response research on natural or anthropogenic disasters and similar unanticipated events. Principal Investigators must contact the NSF Program Officer(s) whose expertise is most germane to the proposal topic before submitting a RAPID proposal. This will facilitate determining whether the proposed work is appropriate for RAPID funding.

A RAPID award may be for up to \$200,000 and up to one year in duration. The award size, however, will be consistent with the project scope and of a size comparable to grants in similar areas. Only internal merit review is required for RAPID proposals. Under rare circumstances, Program Officers may elect to obtain external reviews to inform their decision. If external review is to be obtained, than the PI will be informed in the interest of maintaining the transparency of the review and recommendation process. The two standard NSB-approved merit review criteria will apply. No-cost extensions and requests for supplemental funding will be processed in accordance with standard NSF policies and procedures. Renewed funding of RAPID awards may be requested only through resubmission of a proposal that will be subject to full external merit review. Such proposals would be designated as "RAPID renewals."

The number of RAPID awards and total funding levels vary each year due to the nature of the award mechanism.

NSF RAPID Mechanism
Awards and Funding Levels

	FY 2015	FY 2016	FY 2017	FY 2018
Number of Awards	199	158	134	265
Total Funding, in millions	\$19.62	\$14.30	\$10.48	\$23.70

Dr. CORDOVA. I would have to get back to you on that; I don't know specifically what the level of funding is. But the unique thing about that program, Congressman Crist, is that it is—I can't say it is infinite, because it is not, but it is very open-ended, because any program officer—because they all have the capacity, the wherewithal to fund the RAPIDS Program, and they make those decisions internally, because they have to be made very quickly. Once in a while, if they really don't understand the science, then they can go out and get a quick assessment of it, but most of those, because of the urgency, are made internally, and they can be made by any of the different directorates.

So, to my knowledge, but I will get back to you with the details, we don't have a specific budget, because one year we can have a Zika or an Ebola crisis, or a host of natural disasters and hurricanes, and the next year perhaps not so many. And so it would ebb and flow with the amount of proposals and the quality of the proposals that we get in to do them.

Mr. CRIST. How does that work? I mean, you can just put more money when bad things happen or reduce money when they don't?

Dr. CORDOVA. Well, no. People have some flexibility within their budgets to fund these awards. It is all about what is the level of funding being proposed. Most of the RAPIDS proposals are—and, again, it is about the details—are on the order that a small team of people wants to go and be ready in the case of tornados or in the case of disease, and they are just not very big in a funding sense of proposals. These are not multi-million-dollar proposals; they are more in the hundreds of thousands of dollars.

Mr. CRIST. I see.

HARMFUL ALGAE BLOOMS FUNDING

And my last question. A Government Accountability report from 2016 that details agency expenditures on harmful algal blooms show that the NSF was at the time the agency with the second-highest algal bloom expenditures. I know the report is a little outdated at this juncture, but can you elaborate on some of the things the National Science Foundation has been doing to address the environmental, economic, and health impacts of harmful algal blooms, particularly Red Tide.

HARMFUL ALGAL BLOOMS AND RED TIDE

NSF continues to fund research on Harmful Algal Blooms (HABs). In FY 2018, NSF supported 39 awards, totaling over \$14 million. NSF-funded HABs research spans several disciplines and includes basic research related to bloom initiation and demise; organismal and ecological research related to understanding the formation of HABs; infrastructure and technology development to

sense and model HABs; and the development of ecofriendly technologies for controlling HABs.

NSF funded research also addresses the environmental, economic, and health impacts of HABs through several programs, including the Ecosystem Studies program. One award, funded by this program, applies advanced, water quality sensing technology to measure spatial patterns and changes in real time to detect early warnings in lakes where HABs are expected to occur. The goal of this research is to develop a new approach for prediction of ecosystem changes pertaining to HABs that will aid in the management of resulting water quality and public health issues (NSF Award #1754712).

As HAB events are temporally limited, NSF has supported researchers using the Rapid Response Research (RAPID) award mechanism. This mechanism is used when there is a severe urgency with regard to availability of, or access to, data, facilities, or specialized equipment. In FY 2018, two of the 39 HAB awards were funded via the RAPID mechanism.

Dr. CORDOVA. I don't know the details on the programs; we can get you that information. I know that we definitely have programs within the Geosciences Directorate and the Division of Ocean Sciences specifically, and also in the Arctic program to address algal blooms, and we can get you a list of the programs that we have funded there, but they are very, very much of concern to the agency and we do fund those programs.

FUNDING NSF'S MISSION

Mr. CRIST. And I misspoke. Finally, do you think that the proposed budget going forward that we are looking at today is sufficient for what your mission is?

Dr. CORDOVA. In any given year, just based on our merit reviews of the rankings of proposals, we leave about \$4 billion on the cutting room floor—that is proposals that are rated very good to excellent. About \$2 billion of those proposals are rated above the average rating of the proposals that are funded.

In a recent call for Mid-scale Research Infrastructure proposals, we received about 400 proposals, which totaled \$4.7 billion worth of funding. So there is great need out there. Whatever our budget is, we will fund the very best possible research using our merit review process.

Mr. CRIST. So do you believe it is sufficient or not?

Dr. CORDOVA. I—

Mr. CRIST. I am not trying to be difficult.

Dr. CORDOVA. I think that the capacity of this country to do amazing research is just tremendous, and all I can say is that we will try to meet the needs for doing great research, the needs of the country, and the curiosity and the imagination of our proposers with whatever funding Congress gives it. And thank you very much for our fiscal year 2019 budget also, which is giving us great capacity to fund excellent research.

Mr. CRIST. Thank you, Doctor.

Thank you, Mr. Chairman.

Mr. SERRANO. Mr. Case.

INTERDISCIPLINARY RESEARCH

Mr. CASE. Good morning, Doctor. You are obviously very passionate about the National Science Foundation, as are many of us, a national institution, and I appreciate your own personal passion and work, but you are here representing our President and our Administration in presenting really his overall budget priorities, and that is what we are after here is priorities.

And, you know, I read your testimony, I listen to your words, and it all sounds incredibly good. I look at your testimony and you talk about the importance of the National Science Foundation, the critical importance of basic research across the world, the contributions not only to science, but to the economy. And I read through your specific programs, the survey telescopes, the big ideas, I agree with all of it; I appreciate in particular the advancement of the Daniel K. Inouye Solar Telescope. And then I get to the one catch line, which is that NSF fiscal year 2020 budget request is 9.6 below fiscal year 2018 and 12.6 below fiscal year 2019.

And I ask the basic question, which Mr. Cartwright and which Mr. Crist just asked, what is going on? Budgets reflect priorities. And the inescapable conclusion that I come to when I read the testimony and listen to your answer is that NSF in general is not prioritized within this President's and this Administration's budget. I cannot explain a reduction of over 10 percent over the last fiscal year when you have thanked this committee a couple of times already for the increase in funding in fiscal year 2019, and of course a 10-percent increase, and then Mr. Cartwright's observation that we are now back to fiscal year 2012 levels.

I just ask you the basic question, what am I to make of that?

I look at your budget splits, I see reductions of almost 10 percent in your basic programs, and then I do see of course an increase for major research equipment and facilities construction of almost 20 percent. I am not sure if that is related to your big ideas. I am wondering whether what is actually going on is you have shifted from kind of a broader, more inclusive research prioritization to really focusing in on a few to the exclusion of many.

Dr. CORDOVA. We fund science and engineering across all disciplines, everything, except for biomedical science, and all of our directorates. When the budget goes up, they all take part in it, and, when it goes down, everything is decreased.

We believe that all of the disciplines, that is what our whole convergence theme is about, need to work together to address major challenges and, in order to do that, we need to fund all aspects of science and engineering, because we never know where the next breakthrough is going to come from.

And so the Ten Big Ideas specifically—well, six of them are research ideas and four are enabling ideas like convergence and all disciplines coming together, like inclusion and broadening participation—they are a strategic framework to look ahead and say where the country is going. And they are very, very broad, they came out of the core, and they will go back into it once they are funded for a few years and new strategic thrusts emerge.

But I hope sincerely that we are funding all areas of science and engineering, because they are all very, very important for our mission.

NSF BUDGET PLANNING

Mr. CASE. Was there a direction at the National Science Foundation to cut 10 percent and find out how to cut it, or was there a more educated process to decide within each of your departments as to the prioritization there?

I am looking, for example, at biological science, 9.7 percent cut; computer information science and engineering, 8.1 percent; basic engineering is 13.3-percent reduction; math and physical science, 16.5 percent; social behavior and analytic economic science, 5.6 percent; Polar programs, 19.6 percent.

I mean, these are all reductions, they are all in some range. How were those reductions made? I mean, was this a bottom-up assessment of National Science priorities or was this a top-down direction to simply reduce the budget?

Dr. CORDOVA. Well, first of all, the President's budget is a 5-percent reduction below the fiscal year 2019 request in non-defense spending, in order to shrink the deficit from nearly 5 percent of GDP in 2020 to under 1 percent of GDP in 2029. And the President's budget reflects that steps we take today to reduce the deficit will help the Nation remain globally competitive and allow our children and grandchildren to remain unencumbered by today's spending. So that is the overall framework for the 5 percent.

And beyond that, if you are asking for details, we at the National Science Foundation all work—when we have a target that we are working for, we work very closely together. It is a bottom-up and a top-down process where we decide what it is that are priorities of Congress, priorities of the Administration, and priorities of the scientific community through input like all the reports, studies of the National Academy of Sciences and our advisory committees—we put all of that together and we come out with a budget that reflects where we think we need to go.

Mr. CASE. Did you have a budget cut directive—back to my question—did you have a budget cut directive to get to 10 percent or was there a more deliberate, thoughtful, generating bottom-up process that assessed that, for example, in the area of biological sciences, you know, we needed to cut by almost 10 percent in that department to arrive at some kind of a merit-based assessment?

Dr. CORDOVA. I think, as I said, Congressman, that the overall framework is the President's initiative to get us back on course with a big deficit that our country is facing and that requires some pulling back on the funding that we have in non-defense spending and, within that framework, we made very conscious decisions about what to do internally.

And I think if you look across the various directorates and you compare them with things that we did in the last couple of years, for example, in fiscal year 2018, we got the money late enough, an extra \$300 million, that we gave it towards one-time funding of specialty facilities that were in great need of repair, Arecibo and others are included in that.

And that pushed up certain units in fiscal year 2018. Once they had spent that one-time funding, then we had that money to apply across the board in fiscal year 2019. And so there are little puts and takes as we go along because of one-time needs.

But in setting the 2020 budget, we had this overall framework of minus 5 percent below the 2019 cap level, and then we went about making conscious decisions about where to take that from. I think you will find that those, the puts and takes, are very fairly done within that framework.

Mr. CASE. Well, they are distributed fairly evenly, I will give you that, but still it is a big cut overall. And that is what I am trying to get at is what kind of prioritization am I supposed to make of that, not only within the scientific community, but kind of across the federal budget. And I understand you are not going to speak to the rest of the federal budget, you are here to talk about the National Science Foundation.

But, again, I am asking you what is actually going on under the surface of this President's budget in the area of scientific research, which we all agree is critical to this country?

Dr. CORDOVA. This is the President's budget. I think you can see that there are priorities of the Administration that are right in sync with NSF priorities in artificial intelligence, quantum research, wireless communications, advanced manufacturing and all. So we do have the priorities of the Administration in our budget.

Mr. CASE. OK. Thank you very much.

Mr. SERRANO. Thank you.

ANTARCTIC INFRASTRUCTURE MODERNIZATION FOR SCIENCE (AIMS)

Director Córdova, your budget request includes a request for \$98 million in funding to continue work on the modernization of the McMurdo facility in Antarctica. Could you briefly walk us through this project?

Dr. CORDOVA. Yes. So the——

Mr. SERRANO. When we are talking about Antarctica, I am telling staff, I get very nervous about asking you to walk us through just in case it is melting, you know, so——

[Laughter.]

Dr. CORDOVA. Well, the AIMS project really started conceptually with the blue ribbon panel that was conducted several years ago now, led by Norm Augustine, in which a panel of very distinguished scientists and engineers evaluated the situation at the McMurdo Station, which is one of three stations that make up the U.S. Antarctica program and that NSF runs on behalf of the country.

And McMurdo is the first station that you arrive at there on the continental coast, and it is by far the largest station, and it is an important depot for logistics to the South Pole and logistics to all the camps where research is done around the McMurdo area.

It is an aging facility. It is something like 40, 50 years old, and it looks like an old mining town that has been left unattended for decades. I first went there in 1996 when I was NASA's Chief Scientist as part of the team to evaluate the conditions at the South Pole station. As a consequence of the Senate's and Congress' look at that, the South Pole station was refurbished, but not McMurdo.

And so McMurdo, in the intervening years, has just become more and more in need of refurbishment.

So the AIMS project was our attempt to come up with a modernization for science program—it stands for Antarctica Infrastructure Modernization for Science—to address this. And it is a very ambitious program. It will address logistics, it will get rid of a lot of old, crumbling buildings there, and put things together in a much more streamlined, efficient plan in order to be able to handle logistics in a better, cheaper, faster way, eventually, but not without an initial cost in order to pay for it.

So that cost has just been determined by a design review. A final design review was just completed a few months ago and presented to our National Science Board in February of this year, and they approved that cost, which is about \$410 million, and it is starting right away. We are ready and doing procurements for the ships that will then take all the supplies down there on the next season, which starts in October.

ANTARCTIC OPERATIONS

Mr. SERRANO. You know, this question comes to mind, it is not a prepared question. So we are there doing some work, research and so on now, what other countries are in that continent?

Dr. CORDOVA. There are many, many other countries that are there, and you can see the flags flying of more than a dozen, maybe close up to two dozen nations. I don't even know. At the last time I counted the flags, there were 17, but there may be more nations that are involved in Antarctica.

Mr. SERRANO. Thank you.

As I understand it, due to the harsh weather and remote location, there are only certain times of the year this work can be done. How will the timing of appropriations impact the completion of the project?

Dr. CORDOVA. The——

Mr. SERRANO. You know, we tend not to always be on time. [Laughter.]

Dr. CORDOVA. Well, we kind of figured that out a few years ago when we had a shutdown that started on October 1st and I think in 2013, and so we now—for Antarctica operations in general, we forward-fund the operation, so that we don't get stuck with people and equipment and everything during the crucial season, which goes from October to February.

For this project, we are fine for starting out for the coming year, because the Board did approve it and we have the funds—thank you, again, for fiscal year 2019 funds—to do the procurements. And so by the time the icebreaker goes and breaks the ice and the supply ships follow it to McMurdo, we will have it all ready.

But, in general, your question is a very good one that appropriations are important on time, so that we can make the procurements, because, once you miss that deadline of when the icebreaker comes and breaks the ice there, then you have lost the entire season.

Mr. SERRANO. You know, I may be the only Member of Congress who ever so often makes a sound, like gridlock does not bother me, because gridlock is a result of democracy. There are countries

where the budget is always on time, you know, because there are only a couple of people making the decision, and here we have a lot of people making the decision.

MID-SCALE RESEARCH INFRASTRUCTURE

Your budget request includes \$75 million for the new Mid-scale Research Infrastructure program, which would invest in research facilities smaller than a telescope, for example, but larger than what can be funded within existing programs. Can you give us some examples of what sort of projects these would be?

Dr. CORDOVA. Sure. As I mentioned earlier, we got a few hundred proposals for our first Mid-scale launch, and those just recently arrived, and they total about \$4.7 billion in requests. I can't talk about those specific proposals, of course, because they are being evaluated, but I can give you several examples of projects that we are doing that are within that frame of a few million dollars to about \$70 million.

One is Advanced LIGO Plus. Advanced LIGO Plus was financed because of the augmentation we got in fiscal year 2018, and so we funded it over 2018 and continuing into 2019, and that project is within that budgetary amount. And that is going to open up a huge volume of the universe to be able to detect gravitational waves.

We have funded upgrades to the Alvin submersible vehicle to study our oceans—that is also in the same monetary framework. We funded improvements to NHERI, which conducts earthquake research and has a shake table that needed refurbishment. We funded a refurbishment to the Palmer Pier. In Antarctica, Palmer is one of our three stations that desperately needed funding and that was also in that same money framework.

And then, finally, we funded the two detectors for the Large Hadron Collider, which are done together under MREFC. Our upgrade is a \$75 million contribution, so that would have fit within that area.

So you can see then from Geoscience to Engineering, to Math and Physical Sciences, they all have very important projects that can be done as mid-scale projects. There is just tremendous demand out there.

And, as technology improves, there are more and more projects that are going to be costing less money. And I guess I could mention Computer and Information Science and Engineering and their recent \$60 million award for the Frontera system, a supercomputer, a high-performance supercomputer at the University of Texas Austin, that is also within that framework.

So it doesn't matter what discipline you are in; there are a lot of important projects that can be done.

SEXUAL HARASSMENT POLICY

Mr. SERRANO. In September of 2018—this is my last question—NSF released a new policy on dealing with sexual harassment by foundation grantees, including the possibility of terminating grant funding because of harassment.

Is it your sense that the policy is working and how many complaints have you received?

Dr. CORDOVA. It is our sense that the policy is working for a couple of reasons. We have gotten tremendous feedback from the community over how important this is, and it will hold institutions accountable for the conduct of researchers. That in itself makes people feel more empowered in the work and the research they are doing. It was a real eyeopener to see how devastating harassment can be within the science and engineering communities.

Universities are being very responsive and calling us at the first inkling that something is amiss just to get our advice, even as they are proceeding with their own inquiries and investigations. We have teams that have gone out, as you probably know, for a long time and have checked on Title IX compliance, and so those teams are continuing to be out there.

But I think, as far as your question is concerned on how many, that is a question that is changing, as you can imagine, as we proceed and I would have to ask our Office of Diversity and Inclusion to get back to you with specific numbers.

NSF'S SEXUAL HARASSMENT POLICY

There are three levels of reporting associated with NSF's Sexual Harassment Policy: (1) notifications—when NSF-funded awardee institutions submit notifications through a secure portal to ODI as required by the new harassment term and condition which became effective October 22, 2018; (2) complaints—when individuals who believe that NSF-funded awardee institutions violated Title IX and they elect to file allegation(s) of sexual harassment with ODI; and (3) communications—when anyone informs ODI of alleged instances of sexual harassment regarding NSF-funded awardee institutions that may lead to a complaint.

Since NSF's release of Important Notice No. 144 on February 4, 2018, stating that NSF will not tolerate sexual harassment, we have received scores of communications pertaining to allegations of sexual harassment, which led to six formal complaints filed with ODI. Since the effective date of the harassment term and condition (October 22, 2018), NSF has received eight notifications from NSF-funded awardee institutions regarding their PIs or Co-PIs being subjected to administrative action because a harassment complaint was filed against them (i.e., administrative leave, barred from entering campus) or findings were made in harassment investigations conducted by the NSF-funded awardee institution. It is important to note that an NSF-funded awardee is required to make notification to ODI only if there is a finding/determination, placement on administrative leave or the imposition of any administrative action by the NSF-funded awardee institution's against the PI or Co-PI regarding sexual harassment on an award made or supplemented after the effective date of October 22, 2018.

Under the new term and condition, which became effective approximately six months ago, a few NSF-funded awardee institutions have elected to remove or replace a PI or Co-PI which was supported by NSF. In this short period of time, NSF hasn't required any NSF-funded awardee institutions to remove or replace a PI or Co-PI as a result of the new term and condition.

You have to realize that we actually put this into force as of the end of October, I think it was October 26th of this past year, so

there has been relatively little time for—and we had a shutdown in the middle of that—for universities, for things to happen since that time. So we can also expect that we really need to evaluate any rise in the number of such instances over the next couple of years; that will be the important marker here.

Mr. SERRANO. Have any investigators had their grant funding withdrawn?

Dr. CÓRDOVA. Under this program that we just started, this new term and condition as of late October, not to my knowledge. But, again, our people that are doing that would have to get back to you.

We are notified and we have been for a long time when investigators commit a transgression, and we have been on top of it and looked into it before this, using our Title IX wherewithal, and there universities have removed investigators. And then when the research is implicated, when they have NSF funding, then we work with the universities to see if that research should continue or not with a different principal investigator or whatever to make accommodations for the research itself without the investigators.

But it is really, in the end, up to the institutions to do something and then—right now they are required to report to us when they have done something so that we don't get the information second-hand, as we had previously. But there have been people that have been removed from research by the universities in the past.

Mr. SERRANO. Thank you.

Mr. Aderholt.

Mr. ADERHOLT. Thank you.

AIMS ESTIMATE INCREASE

Let me follow up with the AIMS project that you talked about a little earlier. Of course, the budget request includes \$98 million to continue the construction and I understand the project is now, as you mentioned, \$410 million. Why have the cost estimates increased?

Dr. CÓRDOVA. So, as I mentioned, we just finished with the final design review and the independent cost estimate, and both of those came out together at the number that we proposed to the National Science Board for their approval of \$410 million. So those were the numbers after very good studies were done.

That is an increase from the original estimate, back in the first days of conceiving the project, those are increased for a couple of reasons. One is because commodities price markets have just changed, and things are more expensive now than they were in the past, and also the whole construction industry in this country has changed because of natural disasters like hurricanes, and so that has changed the market as well.

So, assessing all those factors is why we have a design review and why we have independent cost estimates to get a really good number. So we will be held to that number as far as our no-cost-overflow policy is concerned.

Mr. ADERHOLT. As it proceeds over the coming years, you don't expect there will be additional costs at this point?

Dr. CÓRDOVA. We hope that our cost estimates are very good ones. There are always what we call unknown unknowns, things

that you couldn't even imagine that would happen, and then we will have to deal with that, but that would apply not just to AIMS, that would apply to any facility that we have anywhere.

NSF'S ROLE IN VORTEX SOUTHEAST

Mr. ADERHOLT. Of course, as you know, tornados are a real concern in my home state of Alabama, and of course other states in the Southeast as well, and we have had a lot of destructive, deadly tornados over the years. Just earlier this month, we had 23 people that lost their lives when an EF-4 tornado tore through the eastern part of the state, and that is why research at VORTEX Southeast are so important. It brings the federal agencies together to better understand how environmental factors affect tornados, the formation of them, their intensity, and of course their path.

Can you talk about NSF's role in the VORTEX Southeast and how NSF has worked with NOAA to build a research campaign to study the unique characteristics of tornados there in the Southeast.

Dr. CORDOVA. First of all, Congressman Aderholt, our hearts go out from the National Science Foundation to those whose lives were lost or disrupted by those tornadoes. And, unfortunately, tornadoes, hurricanes, floods are events that we have had to live with. And our goal at NSF is to do the research that is needed to better predict those kinds of things and what their consequences could be to help people to get out of harm's way, and to also help with recovery. So prediction and resilience and recovery are what we fund research about.

Now, with NOAA we do have a collaboration on the VORTEX program. As you know, it is run out of NOAA's National Severe Storms Laboratory in Oklahoma, and that began with a workshop in 2015 in Huntsville, Alabama, and that field work is ongoing and was in effect when those deadly tornados struck earlier this month.

NSF has contributed a lot to tornado research. I mentioned in my oral remarks about the development of mobile Doppler radar. Kelvin Droegemeier, the new Director of OSTP and a former vice chairman of the National Science Board, which is the policy arm of the National Science Foundation, is a tornado researcher and we have funded a couple of the centers that he has headed up on this tornado research.

So we stand ready to work with our partners at NOAA and NSSL to support scientists to conduct this vitally important research.

Mr. ADERHOLT. Is—oh, you know, how would NOAA's proposal, as I understand it, to terminate funding for the VORTEX Southeast in fiscal year 2020 impact your work at NSF?

Dr. CORDOVA. As I said, we are committed to research and that project has been a particularly good one. We will continue to fund through our PREEVENTS program in engineering and geosciences, we will continue to be funding the research that I mentioned on prediction and resilience and prevention. I don't know the details of NOAA's budget, of course, but our commitment there is to do this important research.

ARTIFICIAL INTELLIGENCE AND GLOBAL COMPETITIVENESS

Mr. ADERHOLT. And I know earlier there was a question about artificial intelligence, and you talked about that in your comments and I think you answered the question. Just to follow up on that, in your opinion, is the United States, do you think it has fallen behind competitors such as China when it comes to funding artificial intelligence research and other emerging technologies?

Dr. CORDOVA. I don't. We continue to have very high standing among the top organizations and research institutions, universities that are doing this kind of research, we still are in the—whatever number you take, top 20, top 10—we still have the leading groups in this country that are doing that research.

We have a tremendous amount of talent and innovation out there. We have a great plan. The White House in 2016 produced an artificial intelligence strategic plan, which is being evaluated by the present Administration. We have a select committee on artificial intelligence that I co-chair with the head of DARPA to work with all the agencies to put us ahead in artificial intelligence. And, very importantly, we have a remarkable industry that surrounds, that is involved, engaged with artificial intelligence, and that is a very creative force and that industry, working together with the government and with non-profits, that just can do amazing things.

We have meetings continually with industry and the White House, and with all the other agencies, on where we need to be leading in artificial intelligence. And just NSF alone, I estimate by counting across all directorates, is spending something like \$492 million on artificial intelligence even within this budget. That is really counting broadly over all the things we do in computer science and with high-performance computers to enable artificial intelligence, but it is all relevant, because artificial intelligence is really a collection of things, a collection of approaches.

The basic research that we are doing on artificial intelligence I think is going to be the real game-changer. There is a lot of innovation in very selected areas of artificial intelligence that are coming out of industry and will continue to come out of industry. But if you think of something like the Internet or the World Wide Web, those came from government funding, and I believe that the real innovation that is going to come in artificial intelligence is also going to come from government funding and it is going to start with basic research.

Mr. ADERHOLT. Are you collaborating with international partners in doing—to advance the research regarding artificial intelligence?

Dr. CORDOVA. We are collaborating with selected international partners, yes. There is, as you know, a huge hunger to do all aspects of artificial intelligence and countries in Europe and Great Britain are among them. We fund investigators, they fund their own investigators, and we do partnerships together. You know, much of the research that is produced and the majority of publications have international teams of authors, and we have gained so much from other countries by working with their best people, their most talented people, and I think that is definitely the wave of the present and the future.

Mr. ADERHOLT. Thank you.

I yield back.

Mr. SERRANO. Well, we have no more questions. We want to just mention that we will have additional questions for the record.

Dr. CÓRDOVA. Of course.

Mr. SERRANO. We want to thank you for your testimony today. We want to thank you for your advocacy on behalf of your agency. We are very supportive of NSF and we will continue to be as your process develops.

So, thank you for your testimony today.

Dr. CÓRDOVA. Thank you, Chairman Serrano.

Mr. ADERHOLT. Thank you.

Dr. CÓRDOVA. Ranking Member Aderholt, thank you.

Mr. SERRANO. And the hearing is adjourned.

UNITED STATES HOUSE OF REPRESENTATIVES
 Committee on Appropriations
 Subcommittee on Commerce, Justice, Science, and Related Agencies
 Hearing on
 NSF FY 2020 Budget Request
 March 26, 2019
 Dr. France Córdova, Director
 Questions for the Record Submitted by
 Robert B. Aderholt

Mid-Scale Research Infrastructure

As part of NSF's Enabling Big Ideas, the FY 2020 budget proposes a total of \$75 million for mid-scale research infrastructure split between NSF's Research and Related Activities account and the Major Research Equipment and Facilities Construction account.

Question 1) Can you explain how this proposal for mid-scale research infrastructure differs from existing funding within NSF for research infrastructure instrumentation and large facility funding?

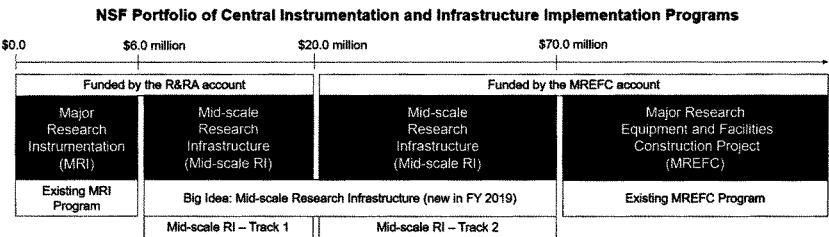
Answer: Prior to FY 2019, NSF's central funding for research infrastructure, instrumentation and large facility projects included two primary components: (i) the Major Research Instrumentation program funded through the Research and Related Activities account, with NSF awards up to \$4 million allowed (total project costs up to \$5.7 million when including required matching funding from the proposing institution); and (ii) large facility construction through the Major Research Equipment and Facilities Construction (MREFC) account, with minimum project costs of \$70 million as set by NSF. This left a gap in funding opportunities for mid-scale research infrastructure in the range between \$6 million and \$70 million, a gap that has been filled imperfectly and only at the low end of this range by a few remaining directorate-level programs. Although NSF directorates have been able to fund a small number of mid-scale infrastructure projects, numerous reports from the National Academies¹, the National Science Board², and other discipline-specific committees have identified a need for significantly greater support for infrastructure in the mid-scale range, since many research domains have the potential to make significant advances using mid-scale infrastructure. This led NSF to identify mid-scale research infrastructure as one of its Enabling Big Ideas.

The FY 2020 budget request includes \$75 million for mid-scale research infrastructure, \$30 million for infrastructure design and implementation in the \$6 million to \$20 million range through the Research and Related Activities account, and \$45 million for infrastructure implementation in the \$20 million to \$70 million range through the MREFC account. These programs are intended to fill the gap identified by the reports referenced above. A graphical summary of NSF's strategy for central funding of all ranges of research instrumentation and infrastructure is shown below; this graphic also appears on page MREFC-4 of the NSF FY 2020 Budget Request. The centralized

¹ National Research Council, *New Worlds, New Horizons in Astronomy and Astrophysics*, The National Academies Press, 2010.

² National Science Board, *Bridging the Gap: Building a Sustained Approach to Mid-scale Research Infrastructure and Cyberinfrastructure at NSF*, NSB-2018-40, October 1, 2018.

funding approach signals the strategic importance to NSF and the research community of support for research infrastructure of all scales across a broad range of science and engineering domains.



Question 2) What mid-scale infrastructure needs currently exist in the research community? Will NSF target certain disciplines first?

Answer: The needs for mid-scale research infrastructure span all the disciplines of science that are supported by NSF. This was found in the large community response to a 2017 NSF Request for Information for projects in the \$20 million to \$100 million range, which resulted in approximately \$10 billion worth of ideas submitted by the scientific community. The demand has been confirmed by the large number of pre-proposals submitted in response to the mid-scale research infrastructure solicitations issued in late 2018. Those pre-proposals have been evaluated, and the best candidates now invited to submit full proposals that are due later this year. Because of the wide range of disciplinary areas that were represented in the responses to the 2017 Request for Information, NSF chose to keep the mid-scale solicitations broad in scope rather than targeting particular disciplines.

Question 3) How would NSF ensure that EPSCoR institutions could effectively participate in the mid-scale research infrastructure program?

Answer: NSF asks its reviewers to evaluate all proposals based on the merit review criteria of Intellectual Merit and Broader Impacts. The EPSCoR jurisdictions and their institutions have demonstrated Intellectual Merit in research proposals submitted by individual faculty, teams of faculty within a jurisdiction, and teams of faculty across multiple jurisdictions. Additionally, one of the Broader Impacts that EPSCoR jurisdictions often can demonstrate is the involvement of populations that have traditionally been under-represented or under-funded in science. The broad range of disciplines that have been encouraged through the Mid-scale Research Infrastructure solicitations enables all institutions to propose in areas that are their particular strengths, rather than focusing on high-profile disciplines that may already be well-supported in non-EPSCoR institutions. NSF received Mid-scale Research Infrastructure preliminary proposals from institutions in EPSCoR jurisdictions and has invited full proposals from EPSCoR institutions.

The inclusion of a track for Design Proposals in the Mid-scale Research Instrumentation program also provides significant opportunities for EPSCoR institutions. This track will enable those whose plans are not yet well developed to apply for funding to help mature their ideas and build capacity.

As is the case with other NSF funding opportunities, the EPSCoR program is interested in providing co-funding for meritorious mid-scale research infrastructure proposals from institutions in eligible jurisdictions.

10 Big Ideas

In FY 2020, NSF proposes to invest over \$600 million for the 10 Big Ideas. As you noted in your testimony, these are processes and interdisciplinary areas of research that NSF has chosen to focus on because they are at the frontiers of science and engineering and will likely be groundbreaking in the coming years.

Question 4) Can you talk about the importance of the 10 Big Ideas and how NSF's focus on these interdisciplinary ideas does not distract from NSF's mission to fund basic, fundamental research?

Answer: The Big Ideas represent opportunities for researchers to make the discoveries that will shape the future of everything from quantum computing, artificial intelligence, and agriculture to space exploration and medical innovation. These are also areas where researchers and countries around the world are focused and are investing robustly. By setting these grand challenges, NSF seeks to focus the efforts of the research community, encourage collaboration across disciplines to accelerate discovery, and to continue U.S. leadership in these fields. Each of the Big Ideas is rooted in NSF core programs and NSF has been funding research in these areas for many years. For example, NSF has been a driver of quantum technology research and quantum information science for decades. Of the 236 NSF-funded Nobel Laureates, 31 were honored for advancing quantum research. The Big Ideas are central to NSF's mission "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes." Dedicated support for the Big Ideas and the Convergence Accelerator reflects NSF's ongoing commitment to advancing science at the frontiers, while supporting the core fundamental research that has advanced the Nation since the agency's founding.

Question 5) As NSF increases its focus on, and support for, these more complex interdisciplinary research proposals, how has the Foundation's peer review process and use of outside reviewers adapted to meet these changes in proposal complexity?

Answer: NSF has a long history of reviewing collaborative, interdisciplinary research proposals. NSF's merit review process begins with program officers from the relevant disciplines determining the appropriate types of external reviewer needed, based on the content of the proposals. When interdisciplinary solicitations are used, the merit review process is typically managed by an interdisciplinary team of program officers. When the composition and preparedness of the proposing team is an important factor, as in the case of Science and Technology Centers and Engineering Research Centers, reviewers with experience in team science are included. NSF has developed electronic tools to help program officers identify potential reviewers with expertise appropriate to the specific, complex research projects submitted.

Question 6) Do you believe NSF's peer review process is healthy?

Answer: Yes, the quality of the merit review process remains very high. Quality control is provided through both internal scrutiny of program recommendations by NSF management and external inspection. NSF's programs are periodically reviewed by panels of experts called Committees of Visitors³. These committees are charged with assessing the quality and integrity of the programs' merit review process and the balance of their portfolios. In addition, the National Science Board, which provides oversight of NSF's merit review process, examines data on NSF's

³ www.nsf.gov/od/oia/activities/cov/

merit review process. One challenge is that NSF receives more high-quality proposals than it is able to fund, resulting in a lower funding rate than desired. To relieve some of the burden on Principal Investigators, NSF has been piloting a reduction in the number of proposal deadlines. This multi-year experiment is showing promise. It appears to be reducing the burden on researchers that comes from having to write proposals to meet frequent deadlines.

Research vs. Equipment and Facilities Funding

Compared to NSF's FY 2018 actuals, in the FY 2020 request, Research and Related Activities funding is reduced by 11%, while funding for Major Research Equipment and Facilities Construction is increased by nearly 20%.

Question 7) Putting aside the additional infrastructure funding the Committee provided in FY 2019, does this proposed allocation of funding suggest that big science equipment – with fixed costs – has a large impact on NSF's traditional support for fundamental research?

Answer: Much of the fundamental research funded by NSF is strongly dependent on investments in research infrastructure that enable the research. Over 15 years ago, the National Science Board report "Science and Engineering Infrastructure for the 21st Century (2003)"⁴ recommended that NSF maintain research infrastructure in a range of 22 percent to 27 percent of the overall NSF budget; the NSF research infrastructure budget has remained in that range for over a decade. In NSF's FY 2020 Request, research infrastructure represents 23 percent of NSF's budget, solidly on the lower end of that spectrum. Since the need for infrastructure funding is greatest in a few disciplines, NSF has proposed a pilot program to centralize a small fraction of facility operations funding in FY 2020 in order to reduce the risk to individual research grants in the facility-heavy disciplines.

Question 8) Can you walk us through the impact of this reduction in research? Such as how many fewer grants will NSF make? How many fewer scientists and engineers won't be supported?

Answer: Overall, NSF's FY 2020 request is expected to provide for about 1,200 fewer awards than in FY 2018. This represents close to 4,000 fewer senior researchers than were funded in FY 2018.

The \$36.93 million increase in MREFC will fund a handful of discrete projects at the level necessary to complete them in the most efficient and cost-effective manner. The request will allow NSF to continue construction of several ongoing projects, initiate detector upgrades to support the High-Luminosity Large Hadron Collider (HL-LHC) and start a handful of midscale projects.

This investment in instrumentation and infrastructure is essential to the conduct of research. For example, without the logistics base in McMurdo, it would be difficult for researchers to access much of Antarctica. Similarly, the Regional Class Research Vessels will form the core of a more capable, smaller, and nimble fleet of vessels for use by oceanographic researchers. The investment in the LHC helps ensure continued access by American academic physicists to the

⁴ www.nsf.gov/nsb/documents/2002/nsb02190/nsb02190.pdf

leading facilities at CERN, permitting them to build off of the Nobel prize winning discovery of the Higgs boson, and investments in midscale research infrastructure will support shared research instruments for use by researchers at colleges and universities across the country.

Question 9) What is supposed to make up for NSF's reduced contributions to basic research?

Answer: The FY 2020 Budget Request attempts to maintain a balance between research infrastructure and individual investigator grants that optimizes the knowledge returned at a given budget level. Much of the basic research funded by NSF requires investments in infrastructure that enables that research. Modern and effective research infrastructure is critical to maintaining U.S. international leadership in science and engineering. The future success of entire fields of research depends upon access to new generations of powerful research tools. Increasingly, these tools are large and complex and have a significant information technology or cyber-infrastructure component. To be considered for MREFC funding, NSF requires that a project represent an exceptional opportunity to enable research and education. The project should be transformative in nature, with the potential to shift the paradigm in scientific understanding. Further, NSF is proposing a new dedicated line within the MREFC account for research infrastructure projects in the \$20 - \$70 million range. Prior to this, such large mid-scale projects could only be minimally supported by the individual directorates due to constraints on R&RA funding. This dedicated funding line implements a high-priority, agency-wide mechanism that includes upgrades to major facilities as well as stand-alone projects, that can enable and advance the basic research supported by NSF.

Research and Development Priorities

Question 10) Of the \$492 Million requested for advancing the scientific and engineering foundations of artificial intelligence, how much of this requested funding will be used to address safety and security concerns from artificial intelligence and autonomous-powered algorithms, such as the recent announcement of NSF partnership with Amazon regarding algorithmic bias mitigation?

Answer: NSF plans to invest \$492 million to advance the scientific and engineering foundations of artificial intelligence (AI) at the FY 2020 Request. NSF investments in AI span fundamental research in machine learning, computer vision, and natural language processing, along with the safety, security, robustness, explainability of AI systems, and understanding the legal and ethical implications of AI; translational research at the intersection of AI and various science and engineering domains as well as economic sectors such as agriculture, manufacturing, and personalized medicine; and education and learning, including growing human capital and institutional capacity to nurture a next generation of AI researchers and practitioners. NSF estimates that approximately 20% of its AI investments will contribute to safety and security of AI and autonomous-powered algorithms. As part of these investments, programs with strong emphasis on AI safety and security include NSF's Secure and Trustworthy Cyberspace (SaTC) program; the NSF Program on Fairness in AI (FAI)⁵ in Collaboration with Amazon; and the Exploratory Research on AI and Society activity Supported Jointly with the Partnership on AI⁶.

⁵ www.nsf.gov/funding/pgm_summ.jsp?pims_id=505651

⁶ www.nsf.gov/pubs/2019/nsf19018/nsf19018.jsp?org=CISE

\$268 million was requested to support fundamental research to reshape strategic industries needed to revitalize American manufacturing.

Question 11) What are the strategic industries in which these efforts will be concentrated and what are the processes that will be impacted most by this research?

Answer: NSF's investment spans the range of fundamental research areas needed to build scientific foundations for future advances in manufacturing. The new knowledge, materials, methods and systems funded by NSF can lead to new opportunities and profound improvements in manufacturing. For example, NSF's investments in additive manufacturing research in the 1980s led to 3D printing and other methods that are widely used today for rapid prototyping and for making industrial products, ranging from automotive and aviation to construction and consumer electronics.

Similarly, NSF's investments in manufacturing research at all length scales, from nano to macro, can enable new paradigms in material processing and structure formation. Investigations to integrate artificial intelligence with manufacturing can make processes more robust and reliable, even in extreme conditions. Cybermanufacturing research can advance network-accessed manufacturing services, including to remote locations. Research in synthetic biology and the manufacturing of cells and cell-based products hold promise for future healthcare and chemicals.

Through connections with industry and government partners, NSF-funded basic research in advanced manufacturing can feed developmental and industrial research in many areas of emerging opportunity. These include, for example, NSF centers and Manufacturing USA institutes for robotics, functional materials, bio-based manufacturing, nanomanufacturing, process intensification, and semiconductors and microelectronics, among others.

Question 12) Are the gains from this revitalization manifested in terms of gains to productivity, growth as a percentage of GDP, or some other metric?

Answer: NSF invests in advanced manufacturing research to develop new methods, processes, analyses, tools, or equipment for new or existing manufacturing products, supply chain components, or materials. Research funded by NSF will enable new functionalities that increase the efficiency and sustainability of the production of the next generation of products and services. These developments will yield advantages such as reduced time to market, new performance attributes, improved small-batch production, cost savings, energy savings, or reduced environmental impact from the manufacturing of products.

NSF also invests in translational research in advanced manufacturing and other areas through the Small Business Innovation Research (SBIR) and Small Business Technology Translation (STTR) programs. NSF's small businesses funding enables them to determine the scientific and technical feasibility of a new concept or innovation that could be developed into new products, processes, or services.

In the long term, innovations that grow from NSF's fundamental research investments will strengthen U.S. technology leadership, economic prosperity, and national security.

Question 13) Are there any anticipated disruptive effects on manufacturing employment?

Answer: NSF invests in educational and workforce development programs to prepare and reskill the future manufacturing workforce. NSF's Research Experiences for Undergraduates program

provides opportunities for students to gain hands-on research experiences in areas important for future manufacturing, such as cellular manufacturing, smart materials, and nanomanufacturing.

NSF-funded centers — such as Engineering Research Centers, Industry-University Cooperative Research Centers, and Materials Research Science and Engineering Centers — prepare undergraduate and graduate students with research and professional skills for manufacturing and other environments. NSF centers provide opportunities for students to participate in industrially-relevant research, interact with industry partners, and learn firsthand about entrepreneurship, innovation, and the paths from fundamental research to commercial products.

In addition, NSF's Advanced Technological Education Program awards grants to two-year community colleges that have partnered with local industry to provide technician training. In 2018, there were active awards in 45 U.S. States and the District of Columbia, and awards totaled almost \$348 million.

NSF recognizes that the landscape of jobs and work is changing with unprecedented speed, driven by the development of new technologies that have moved from the factory floor to an expanding array of knowledge and service occupations. These changes, while promising benefits to the Nation in the creation of new industries and occupations, increased productivity, enhanced innovation, and sustained global leadership, come with risks for workers as technology may, in some cases, eliminate entire job classes.

In FY 2018, NSF started investing in 10 Big Ideas, one of which is called The Future of Work at the Human-Technology Frontier (FW-HTF). The FW-HTF Big Idea supports convergent research to develop new human-technology partnerships leading to increased worker productivity and innovation. This research will prepare the workforce for human-technology partnerships, in manufacturing and other industries, by combining the benefits of new technologies, such as artificial intelligence (AI) and virtual environments, with increased understanding of value-based social, economic, and educational impacts.

Furthermore, in FY 2019, NSF began the NSF Convergence Accelerator activity, which seeks to transform how NSF supports the most innovative science, reflecting its commitment to be at the cutting-edge, supporting foundational research, while also encouraging rapid advances through partnerships between academic and non-academic stakeholders. NSF Convergence Accelerator pilot tracks in FY 2019 include two for FW-HTF: (1) smart job matching, including the development of predictive analytic tools, economic and labor market analyses of future workplace skill requirements, and educational technologies for life-long, adult learning; and (2) innovative approaches to support the development of workers with the skills required for 21st century work, including data science, predictive analytics, and AI/machine learning techniques.

Through our investment in research, education and workforce training, centers, and partnerships, NSF helps the U.S. prepare for the future of manufacturing.

**Questions for the Record Submitted by
Matthew Cartwright**

Research with National Security Impact

Question 1. Can you provide some examples of current and/or past NSF funding that supports research with a national security impact? Are these kinds of programs at risk if the President's budget cuts were enacted?

Answer: NSF's mission is "...to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense..." Across its portfolio of research and education programs, NSF investments in fundamental, early-stage research create a foundation for breakthroughs that advance the Nation's security and competitiveness in the global context.

Examples of these investments include NSF's continued support for cybersecurity research and education, which protects and preserves the growing societal and economic benefits of cyber systems while ensuring preservation of individual privacy as well as usability. NSF also continues investments that aim to understand, design, and model the Nation's interconnected food, energy, and water systems through an interdisciplinary research effort that incorporates all areas of science and engineering and addresses the natural, social, and human-built factors involved. NSF supports research in the safety, resiliency, security, and sustainability of the Nation's critical infrastructure, spanning telecommunications, transportation, and the electric grid. For example, the President's FY 2020 Request contains support for the first full year of operations of the Daniel K. Inouye Solar Telescope, whose fundamental research on the sun ultimately may help in the development of improved prediction of the space weather events that can threaten the electric grid. In addition, the Foundation supports research on judgments and decision-making as well as research that advances understanding of the risks and hazards associated with natural, technological, and man-made threats and disasters.

The President's FY 2020 Request continues support in these areas and other research and education investment areas that advance national security.

Quantum

Question 2. Considering the large investments made by China in quantum research, how important is it the United States remain a leader in this emerging field?

Answer: The world envisions a new 21st century technology based on the exploitation of unique quantum properties that have been known for years, but which have to this date been vastly underutilized due to lack of appropriate instrumentation. NSF has been investing in quantum information science research for decades, and as quantum technology has attracted increasing global interest in this century, the United States has emerged as a clear leader in this field. Over the past five years tremendous progress has been made in the tools needed to realize a new quantum technology base out of which will grow applications that cross the fields of computing, communication, and sensing. Quantum technology may be the next wave of foundational innovation to extend the digital revolution beyond the next 20 years. Quantum technology will

continue to drive and shape countless facets of modern society, so whichever nation is first to develop these technologies may determine the face of global society in the century. U.S. leadership is important to retaining the Nation's position from the perspectives of security, economics, and social well-being.

Question 3. In the budget justification for QIS, you reference the funding will help “deliver proof-of-concept devices, applications, tools, or systems with a demonstrable quantum advantage over their classical counterparts.” Can you elaborate on these applications? What commercial applications hold the greatest promise within quantum research?

Answer: Applications of QIS research with significant commercial potential span the areas of quantum sensing, computing, and communications. Quantum-based sensors are already finding applications in the area of inertial navigation through atom-based interferometers, which offer enhancements to existing resolution capabilities. Quantum sensing devices based on what are referred to as nitrogen-vacancy centers (N-V Centers) in diamond are targeted for measuring microscopic magnetic and electric fields, with potential applications in such areas as high-resolution biological imaging when inserted into a living cell. Similarly, quantum computing has already been shown to offer greatly enhanced efficiency and capacity over classical computing, performing complex computations using only a few qubits. Potential near-term applications are currently being probed by researchers in the growing areas of quantum supremacy, which seeks to demonstrate solutions to problems that cannot be done using any classical machine currently available, and that of computing hybrid systems, which combine few-qubit systems with traditional computers. Small-scale quantum computers realized using diverse device architectures are already acting as test-beds for the development of general-purpose quantum computing algorithms and programming. These will lead to entirely new paradigms in design and implementation of the next stage of quantum computing technologies. Additionally, quantum-based encryption systems, currently being realized in city-scale communication systems, but under exploration in the area of quantum communications for larger national-scale systems, will allow for tremendous advances in cybersecurity that will be essential for not only the national defense, but also for securing the Nation's economic enterprise.

Question 4. If the United States were forced to rely upon Chinese quantum computing, communications, and sensing capabilities, would that have a negative impact on the development of next generation applications?

Answer: Absolutely. Early-stage technologies and guaranteed access to these technologies for U.S.-based scientists and technologists are critical to the iterative process of rapid progress in quantum science, which can then lead to commercial impact, just as it was in the case of the transistor and the Internet. The second quantum revolution is still in its infancy. Today's investments in early-stage applications and products will set the trajectory for the next generation of applications and products, most of which are not yet imagined. The United States has, thus far, had a fantastic record of leveraging homegrown research and translating it into commercial success with positive societal impact in the digital economy. If the United States were instead forced to rely on Chinese quantum computing, it would certainly have adverse impacts on the Nation's long-term security and economic prosperity.

Question 5. What is the Administration doing to develop the workforce necessary to meet U.S. industry's needs for quantum-trained talent?

Answer: The National Science and Technology Council (NSTC) Subcommittee on Quantum Information Science (SCQIS) has as one of its primary goals to develop quantum-trained talent that is critical to the implementation of the National Quantum Initiative (NQI). The primary agencies that make up the existing SCQIS highlighted this as one of the primary policy goals as part of the National Strategic Overview for Quantum Information Science⁷ released in September 2018. To meet long-term industry needs, it will be especially important to accelerate growth uniformly across the physical sciences, engineering, and computer science. NSF has been in active discussion with industry to identify the challenges they face for workforce development and has already taken major steps in generating this talent. Development of a transdisciplinary, quantum-ready workforce was a central component of the 2017 Dear Colleague Letter: Growing Convergent Research at NSF⁸, which resulted in two dedicated workforce training awards in FY 2017 and FY 2018, respectively: summer schools for graduate students and postdoctoral researchers (NSF/DOE Quantum Science Summer School (QS3))⁹, and a new paradigm for graduate training that connects students to industry mentors (Quantum Information Science and Engineering Network (QISE-NET))¹⁰. In FY 2019, NSF launched a new program to increase the number of academic faculty in quantum computing, Quantum Computing & Information Science Faculty Fellows¹¹. Beyond these dedicated programs, all NSF awards focus on the integration of research and education, and workforce preparation in particular is an essential component of all the awards issued through the Big Idea Quantum Leap activity, which is central to the overall NSF investment in quantum. These efforts combine to create a pipeline that will produce an increasingly quantum-ready workforce.

Question 6. Some quantum applications may be several years away, so how can we retain the talent we develop?

Answer: While some of the highly touted applications may be several years away, there are short-term applications that are already underway, particularly in the area of sensing and to some extent computing. These early efforts in applying quantum-based technologies will certainly breed other applications. We already see this in the emergence of start-up companies that are exploiting the need to develop a supply chain to support even the longer-term applications. This supply chain will in itself create an economic ecosystem that will both need and utilize the talent that can be developed. Sustained U.S. investments in quantum research, development, and workforce will be critical to incubating and guiding the growth of this ecosystem, to ensure that it will be prepared to support the big-picture applications that quantum technology will enable down the road.

Question 7. Can the NSF/DOE Centers that were authorized in HR 6227 help develop the talent needed to maximize our federal investment in quantum?

Answer: This is indeed one of the primary goals of the NSF centers that are already planned as part of the NSF Quantum Leap Big Idea, which are responsive to the call in HR 6227. In every case, all proposals will be reviewed not only on the quality of the science but on plans that they are putting in place to develop a quantum workforce. The centers are explicitly charged to work collaboratively with industry and other institutions to develop new cross-disciplinary approaches

⁷ www.whitehouse.gov/wp-content/uploads/2018/09/National-Strategic-Overview-for-Quantum-Information-Science.pdf

⁸ www.nsf.gov/pubs/2017/nsf17065/nsf17065.jsp

⁹ <http://qs3.mit.edu/index.php>

¹⁰ <https://qisenet.uchicago.edu/>

¹¹ www.nsf.gov/pubs/2019/nsf19507/nsf19507.htm

for education, training and workforce development, including but not limited to the development of new courses, curricula, and/or graduate degree programs. The centers' focus on direct interaction with industrial partners will additionally help to ensure that the talent that will be developed can find immediate application to the needs of industry. These programs were designed to address the intent of the legislation and the needs of the quantum research community in both academia and industry.

TUESDAY, MARCH 26, 2019

MEMBERS' DAY

Mr. SERRANO. The hearing will come to order. This afternoon, we have a great opportunity to hear from our colleagues in Congress about the programs and agencies that they care about. The CJS bill covers a lot of territory, so it is important that as we move forward with the fiscal year 2020 appropriations process, we try and put in priority what is important to those who serve with us.

Last year, I noted to Chairman Culberson that it is interesting that every member who came before us asked for further investment in the areas covered by this subcommittee. No one comes here to tell us to reduce funding for our agencies or programs. It shows the importance of investing in our Nation and everything from scientific research to a fair and equitable justice system to economic development and beyond.

I look forward to hearing from our witnesses. And with that, let me turn to my colleague, Mr. Aderholt.

Mr. ADERHOLT. Thank you, Mr. Chairman. And thank you for yielding. And certainly, as you mentioned, this subcommittee covers a wide swath of issues, important federal funding from combating crime and terrorism, promoting trade, forecasting the weather, invest in basic research, and of course, space exploration.

And so I also want to thank the chairman for holding this Member Day hearing and allowing members from the House to be able to come before our subcommittee and to talk about issues that are important to them. I think it is vital that members do have an opportunity to convey their priorities and to educate us on the issues that are important to them. We want every member to know that we are listening to you and we want to try to accommodate every way we can as we proceed through the appropriations process.

So with that, thank you again, and I yield back.

Mr. SERRANO. Thank you, Mr. Aderholt. I just want to reinforce your comments. We may not keep you here a long time, but it doesn't mean we are not listening and we are not taking notes. Trust me.

So our first witness, speaker, presenter is my colleague and brother from New York, chairman of our democratic caucus, Mr. Jeffries.

STATEMENT OF HON. HAKEEM S. JEFFRIES, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. JEFFRIES. Good afternoon, Chairman Serrano, Ranking Member Aderholt, and distinguished members of the subcommittee. Thank you for the opportunity to testify on funding priorities for the fiscal year 2020 Commerce, Justice, Science, and Related Agencies Appropriations Bill.

Before I say anything further, let me just state on the record our gratitude. The people of New York are grateful for the 45 years of iconic, legendary, distinguished service that you, Chairman Serrano, have provided to the people of the south Bronx, who are much better off for you having taken this public service journey. And we look forward to continuing to work with you through the balance of the 116th Congress.

I am here to request that the First Step Act receive the full funding amount authorized by law. The First Step Act became law on December 21st of last year, when it was signed into law by President Trump, after passing the House of Representatives and Senate with overwhelming bipartisan support, led in a significant fashion by Congressman Doug Collins.

A key component of this important legislation was the authorization of \$75 million per year for the Bureau of Prisons to expand and develop opportunities for incarcerated individuals to participate in programming and productive activities shows to reduce the risk of recidivism. This programming will provide returning citizens with the necessary tools for a successful and lasting transition back into their communities.

It will also make our federal prisons more effective places of rehabilitation and eventually reduce overcrowding and save taxpayer dollars.

Today, there are more than 180,000 inmates in the federal prison system. Almost every single one of them will be released at some point in time. However, high rates of recidivism suggests that we can do much better to prepare currently incarcerated individuals for reentry. Research has shown that programming, like the kind authorized by the First Step Act, will dramatically reduce recidivism and save taxpayer dollars.

According to a recent study, inmates who participated in correctional education programs were 43 percent less likely to recidivate than inmates who did not. Congress passed the First Step Act to give individuals in the Bureau of Prisons' custody a better chance to return to a productive law abiding life. Funding for the law's implementation is critical to achieve this goal.

We have seen many examples of educational, vocational, and faith based programming, making a real difference in the lives of incarcerated individuals. While the BOP currently offers literacy classes, English as a second language, parenting classes, wellness education, and adult continuing education, demand greatly exceeds supply.

One study found that 70 percent of incarcerated individuals who wanted to take an education program in order to expand their knowledge or skills and to increase their chances of getting a job upon release, expressed an interest, but only 21 percent were actually studying for a formal degree or certificate because of the lack of capacity.

Further, BOP has reported long waiting lines for work and educational programs. It is critical that we provide everyone who wants to participate an opportunity to do so. While the expanded programming and associated earn time credits will lead to significant long term cost savings for taxpayers and improved public safe-

ty, the First Step Act must be fully funded at \$75 million per year over a 5-year period to make these benefits possible.

This is an opportunity to make a transformational investment in the lives of incarcerated and formerly incarcerated individuals, giving them a chance to be bigger than the mistakes that put them behind bars, and to continue the progress that we have made in a bipartisan way on criminal justice reform.

Once again, I thank the distinguished chairman and ranking member for your time and consideration.

[The information follows:]

Testimony of Congressman Hakeem Jeffries (NY-08)**House Committee on Appropriations****Subcommittee on Commerce, Justice, Science, and Related Agencies****March 26, 2019**

Chairman Serrano, Ranking Member Aderholt and distinguished members of the Subcommittee, thank you for the opportunity to testify on funding priorities for the Fiscal Year 2020 Commerce, Justice, Science, and Related Agencies (CJS) Appropriations bill. I am here to request that the First Step Act receive the full funding amount authorized by law.

The First Step Act became law in December of last year after passing the House of Representatives and Senate with overwhelming bipartisan support. A key component of this important legislation was the authorization of \$75 million per year for the Bureau of Prisons (BOP) to expand and develop opportunities for incarcerated individuals to participate in programming and productive activities shown to reduce the risk of recidivism.¹ This programming will provide returning citizens with the necessary tools for a successful and lasting transition back into their communities. It will also make our federal prisons more effective places of rehabilitation and eventually less crowded and costly.

Today, there are more than 180,000 inmates in the federal prison system.² Almost every one of them will be released at some point in time. However, high rates of recidivism suggest that we can do better to prepare incarcerated individuals for reentry.

Research has shown that programming, like the kind authorized by the First Step Act, will reduce recidivism and save taxpayer dollars. According to a recent study, inmates who

¹ P.L. 115-391, Section 104(a).

² Federal Bureau of Prisons, *Population Statistics*, https://www.bop.gov/about/statistics/population_statistics.jsp.

participated in correctional education programs were 43 percent less likely to recidivate than inmates who did not.³ Congress passed the First Step Act to give individuals in BOP custody a better chance to return to a productive and law-abiding life. Funding for the law's implementation is critical to achieving this goal.

We have seen many examples of educational, vocational and faith-based programming making a real difference in the lives of incarcerated individuals. While BOP currently offers literacy classes, English as a Second Language, parenting classes, wellness education, adult continuing education and library services, demand far exceeds supply. One study found that 70 percent of incarcerated individuals wanted to take an education program in order to expand their knowledge or skills and to increase their chances of getting a job upon release, but only 21 percent were actually studying for a formal degree or certificate.⁴ Further, BOP has reported long waiting lists for work and educational programs. It is critical that we provide everyone who wants to participate the opportunity to do so.

While the expanded programming and associated earned time credits will lead to significant long-term cost savings and improved public safety, the First Step Act must be fully funded at \$75 million to make these benefits possible. This is an opportunity to make a transformational investment in the lives of incarcerated and formerly-incarcerated individuals, giving them the chance to be bigger than the mistakes that put them behind bars. Thank you for your time and consideration.

³ Lois M. Davis, Jennifer L. Steele, Robert Bozick, Malcolm V. Williams, Susan Turner, Jeremy N. V. Miles, Jessica Saunders, & Paul S. Steinberg, *How Effective Is Correctional Education, and Where Do We Go from Here?*, Rand Corporation, https://www.rand.org/pubs/research_reports/RR564.html.

⁴ Bobby D. Rampey, Shelley Keiper, Leyla Mohadjer, Tom Krenzke, Jianzhu Li, Nina Thornton, Jacquie Hogan, Holly Xie, & Stephen Provasnik, *Highlights from the U.S. PLAAC Survey of Incarcerated Adults: Their Skills, Work Experience, Education, and Training*, National Center for Education Statistics, U.S. Department of Education, <https://nces.ed.gov/pubs2016/2016040.pdf>.

Mr. SERRANO. Thank you, Mr. Jeffries. So we usually at these meetings don't ask many, if any, questions. But we want to first congratulate you on a bipartisan bill passing, which is unique every so often. And secondly, an important question, is there someone in the Senate asking for this amount also?

Mr. JEFFRIES. It is my understanding that Chairman Grassley, who was the lead sponsor in the Senate, along with several other members on the Democratic side of the aisle are fully supportive of the \$75 million and will work to carry the load on the Senate side as well, since that was a critical and important part of the legislation.

Mr. SERRANO. Great. Is that all? Thank you, Mr. Jeffries—

Mr. JEFFRIES.. Thank you, Mr. Chairman.

Mr. SERRANO [continuing]. For your testimony. We will call you when we get the money.

Mr. JEFFRIES. I hope so.

Mr. SERRANO. Don't call us. We will call you. Mr. Posey is next.

THE HONORABLE BILL POSEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. POSEY. Thank you—

Mr. SERRANO. Welcome.

Mr. POSEY [continuing]. Mr. Serrano and Ranking Member Adersholt for holding this hearing today. You actually want to hear from members about what their priorities are, and thank you for the opportunity to come before you and talking about keeping America's Space Program first in the world.

As you know, the United States is the only nation to have landed humans on the moon and return them safely to Earth. It is among the greatest achievements in the history of mankind and has significantly contributed to America's leadership in the world.

The Apollo Missions opened the door to other significant accomplishments, like building space shuttles to test the limits of human space flight, prolonged, robotic exploration of Mars, launching a space-based telescope that can see far beyond our solar system, and conducting scientific research on the International Space Station that is benefitting those of us on Earth, as well as enabling us to understand and prepare for challenges of long-term space missions.

In 2010, Congress authorized a construction of NASA's Space Launch System, that you will hear referred to as the SLS, as a successor to the space shuttle that will be capable of launching both cargo and human crews into space. The idea is to build a powerful rocket that will enable humans to return to the Moon and eventually travel to Mars and other deep space destinations. The SLS and its Orion crew capsule have received strong bipartisan funding support by Congress over the past 9 years.

Today, I ask you to continue that support in order to keep the SLS program on track and ready for its first mission next year. I respectfully urge you to consider a total funding level of \$2.15 billion for the Space Launch System for fiscal year 2020, which would preserve the fiscal year 2019 approved funding level and avoid the proposed \$400 million reduction in the Administration's budget request. This funding is necessary to complete the rocket and build

the necessary infrastructure on the ground to support the first launch.

Specifically, no less than \$200 million is needed for the exploration upper stage, which will make it possible to have both human crews and cargo on board the same flight. The Orion crew capsule will serve as the exploration vehicle that will carry astronauts to space atop the SLS. For 2020, 1.5 billion is needed to continue building this cutting edge Orion vehicle, the only capsule currently being designed and assembled which can protect our astronauts below Earth orbit, in Moon orbit, and around Mars.

Lastly, we need to continue our efforts to build the infrastructure needed on the ground support for safe and successful launches. Exploration ground systems are critical to our space launch capability. Put simply, without strong launch systems on the ground, the rockets don't go anywhere.

I am requesting that the committee keep this mission on track by providing \$590 million for the exploration ground systems in fiscal year 2020 and an additional \$50 million to continue the construction of the second mobile launcher, which, when completed, will give us a unique multiple launch capability and further protect our national security. This will also preserve the fiscal year 2019 approved funding levels.

You can't help being impressed with the progress and development of the commercial space sector. I am excited about launching American astronauts from American soil, aboard both the Boeing Starliner Crew Vehicle and SpaceX Crew Dragon. These low Earth orbit missions are important for sustaining our research being conducted on the International Space Station, allowing NASA to plan bold, deep space exploratory missions.

One final point, as I have often said, space is critical to our national security. It is the ultimate military high ground, and whoever controls space will control the destiny of the world. That is why it is so important that we maintain America's leadership in space.

The Defense Intelligence Agency released a report in January entitled "Challenges to Security in Space," which discusses plans by China and Russia to develop their own versions of super heavy lift space vehicles similar to our own SLS. Now is the time to double down on America's space program and commit the resources necessary to keeping America first in space. It would be foolish to relinquish this military high ground to Russia and China, who perhaps do not have America's best interest in mind.

I want to again thank you, Chairman Serrano, and Ranking Member Aderholt, and the committee for your time today. Space has been one of the truly bipartisan issues in Congress. I very much enjoyed working across the aisle on issues. Our achievements in space have served to unify our Nation and the world.

I ask my colleagues to join as we continue to build a foundation for the next decade to be defined by human exploration, scientific discovery, and American achievement. Thank you very much.

[The information follows:]

Testimony from Congressman Bill Posey (Florida-08)**For the House Commerce, Science & Justice Appropriations Subcommittee****Hearing Day on March 26, 2019****In support of the America's Space Programs****Submitted March 21, 2019**

Chairman Serrano, Ranking Member Aderholt and Members of the Committee, thank you for holding this hearing today and thank you for the opportunity to come before you to discuss the importance of maintaining strong support for America's Space Program.

The United States remains the only nation to have landed humans on the Moon and returned them safely to Earth. It was among the greatest achievements in the history of the human race and it has significantly contributed to America's leadership on the world stage.

The Apollo Missions opened the door to other significant accomplishments like building Space Shuttles to test the limits of human space flight, prolonged robotic exploration of Mars, launching a space-based telescope that can see far beyond our solar system, and conducting scientific research on the International Space Station that is benefiting those of us on Earth as well as enabling us to understand and prepare to meet challenges of long-term space missions.

In 2010 Congress authorized construction of NASA's Space Launch System (SLS) as a successor to the Space Shuttle that will be capable of launching both cargo and human crews into space. The idea is to build a powerful rocket that will enable humans to return to the Moon and eventually travel to Mars and other deep space destinations. The SLS and its Orion crew capsule have received strong bipartisan funding support by Congress over the past nine years.

Today I ask you to continue that support in order to keep the SLS program on track and ready for its first mission next year. I respectfully urge you to consider a total funding level of \$2.15 Billion for the Space Launch System for FY2020 – which would preserve the FY2019 approved funding level and avoid the proposed \$400 million reduction in the Administration’s budget request. This funding is necessary to complete the rocket and build the necessary infrastructure on the ground to support its first launch.

Specifically, no less than \$200 million is needed for the Exploration Upper Stage which will make it possible to have both human crews and cargo aboard the same flight. The Orion Crew Capsule will serve as the exploration vehicle that will carry astronauts to space atop the SLS. For FY2020 \$1.5 billion is needed to continue building this cutting edge ORION vehicle, the only capsule currently being designed and assembled which can protect our astronauts beyond low Earth orbit, in Moon orbit and around Mars.

Lastly, we need to continue our efforts to build the infrastructure needed on the ground to support safe and successful launches. Exploration Ground Systems are critical to our space launch capability. Put simply, without strong ground systems, our rockets will go nowhere. I am requesting that the committee keep this mission on track by providing funding of \$590 million for Exploration Ground Systems in FY2020 and an additional \$50 million to continue construction of the second mobile launcher which, when completed, will give us a unique multiple launch capability and further protect our national security. This will also preserve the FY2019 approved funding levels.

Let me also say that I continue to be impressed with the progress and development of the commercial space sector. I’m excited about launching American Astronauts from American soil

in my district aboard both the *Boeing Starliner Crew Vehicle* and *SpaceX Crew Dragon*. These low earth orbit missions are important for sustaining the research being conducted on the ISS, allowing for NASA to plan bold, deep space exploratory missions.

One final point, as I have often said, space is critical to our national security. It is the ultimate military high ground, and whoever controls space, will control the destiny of the free world. That's why it's so important that we maintain America's leadership in space. The Defense Intelligence Agency released a report in January entitled "*Challenges to Security in Space*," which discusses plans by China and Russia to develop their own versions of super heavy lift space vehicles similar to our own SLS. Now is the time to double down on America's space program and commit the resources necessary to keeping America first in space. It would be foolish to relinquish this military high ground to Russia and China who perhaps do not have America's best interest in mind.

I want to again thank you Chairman, Serrano, and Ranking Member Aderholt, and the Members of this Committee for your time today. Space has been one of the truly bipartisan issues here in Congress – I have very much enjoyed working across the aisle on space issues – and our achievements in space have served to unify our nation and the world. I ask my colleagues to join us as we continue to build a foundation for the next decade to be defined by human exploration, scientific discovery and American achievement. Thank you.

Mr. SERRANO. Thank you, Mr. Posey. Just one point to make and that is in the change of ranking member and chairman in this committee, one thing did not change and it is our respect and our love for the work that NASA does. So your words are not falling on closed ears here.

We can't tell you you can walk out with the money, but we can tell you that it is not just an exercise in making a statement.

Mr. POSEY. I have never felt that way in this committee.

Mr. SERRANO. Thank you.

Mr. POSEY. I thank you. Bless you, Mr. Chairman.

Mr. ADERHOLT. I appreciate your comments on that, and I agree, and we appreciate your testimony. Thanks so much.

Mr. POSEY. Thank you.

Mr. SERRANO. Ms. Jackson Lee, please join us.

**THE HONORABLE SHEILA JACKSON LEE, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF TEXAS**

Ms. JACKSON LEE. Mr. Chairman, thank you, first of all, for giving me this opportunity, Mr. Aderholt. Both of you, I have had the opportunity in the years that I have served to work with, and I thank you very much for your very sincere and important work on committees that I have overlapping jurisdiction as a member of the Judiciary Committee.

So these are very important issues before me. I would like to generally make a statement dealing with the work of the issues of commerce, the issues of justice, and the issue of science. Much of this are economic engines that are important. I have been on the Science Committee for a number of years in my early service to this Congress. It is an important committee. And I still remain on the Judiciary Committee.

As it relates to commerce, one of the important responsibilities of commerce is a census. That is the lifeline of the American people in ensuring that the work of counting Americans, everybody that is here, is important. And I am a strong supporter of \$8 billion and may need a little bit more for the census because I think we need to address concerns with our very diverse population.

As I recall, in the Constitution, it is to count every single person. It doesn't ask them for any litmus test, or who they are, or what—but they are in this country and they need to be counted. So I hope that some of the extra attachments or extra restraints about asking questions on citizenship and otherwise, that we realize that the constitutional fathers intended that every single person be counted.

Let me now indicate my concern on criminal justice reform, advancement of scientific knowledge and space exploration, and expanding the economic opportunity.

I support \$300 million for community oriented policing. I think we need to restore that. Remember that program came in under the 1990s with President Clinton. I will tell you, our law enforcement celebrate the opportunity to invest in good law enforcement, rebuilding the trust and confidence between the law enforcement and community. And I think the COPS program can help that.

I support \$75 million for the National Instant Background Check. As a member of the Judiciary Committee, we have just

passed legislation regarding universal background check. But we also had the NICS fixed that individuals who were able to squeak through and get guns, like Dylann, like the gentleman who went into a South Carolina church in Charleston, South Carolina and killed nine worshippers. This money is very important.

I support \$450 million for the Byrne Justice Assistance Grant just passed on the floor of the House, a reauthorization of the juvenile block grant, and the bullying intervention and prevention. Talk to any parent in America's schools and neighborhoods. They are crying out for intervention programs dealing with bullying and cyber bullying. My legislation deals with that. Byrne grants can be very helpful in a number of issues from juvenile justice, crime prevention, education, and corrections.

I support \$255 million for the State Criminal Alien Assistance Program and support and recognize the critical role of this program, and particularly in Texas.

I support \$150 million for Second Chance Act. This is something that I worked on with Danny Davis. He was the lead. But it provides grants to government agencies and I would like to see us ensure \$150 million. I would argue that there are so many people that are impacted by this that I would like and hope the committee could consider increasing that amount.

I support \$500 million for the Violence Against Women Act. I wrote the bill that is now headed towards the United States Congress floor of the House. We have passed it at a hearing in the subcommittee, marked it up in the full committee. It is an important initiative that has a large amount of funding for our law enforcement to be able to prosecute. And we realize that domestic violence is an epidemic, and the importance of providing law enforcement, and counseling, and all of that. And so this is a very important funding source.

I support \$35 million to prevent the trafficking of girls. Houston, Texas has been called the epicenter of trafficking. Trafficking is all around the world. And the one point that I would make about trafficking, again, I ask and encourage increased funding. The one thing about trafficking is it is recycling. These girls can be recycled and these boys can be recycled. You can use—drugs is one thing, but you can make money on cycling these children in the trafficking business and we need to stamp out trafficking. And so I would support increasing that.

Two hundred fifty million dollars for the juvenile justice programs. I have mentioned earlier the importance of these programs. I am looking to reform the juvenile justice system. Many people don't realize, and I certainly would hope this could support best practices, that juveniles are not sentenced. They are sent to the juvenile system with no sentence. And literally, they can stay there until they are 21.

I think credible adults and family members would want to see a better pathway for their young people for them not to be part of the recidivism of someone who stays in a system for 8 years or more because they come in at 12 or 13 and they have infractions. And all of a sudden, they are there until they are 21 years old.

And so I am hoping that maybe language could suggest that states need to be more effective and creative with how they house juveniles.

I support \$125 million for the Debbie Smith DNA backlog. I have worked on this issue with a number of my colleagues. And this has to do with the DNA labs. And before we got our hands into it, DNA labs are dealing with rape kits across the Nation, it was appalling. We have made a great difference. I hope \$125 million is, in fact, sufficient, but I would encourage consideration on that one as well.

Let me quickly say the Civil Rights Division, it is something that I hope we can look at in a bipartisan way. It is a very important set of agencies. It is \$30 million—I just want to make sure that they are able to deal with the intrusion of outsiders, Russian adversaries and others, into our election process. I want them to be able to protect the voting rights, to protect civil rights, to be able to stand in the courts against hate crimes. And they really need to be assured with the resources, the investigatory resources that they need. I would encourage an increase in the \$30 million, but I support it.

Five hundred million dollars for Legal Services is a vital organization. Many times, they are the only lifeline—if you don't have a public defendant, only lifeline for the vulnerable in things like disabilities benefits, families.

Finally, with science, I support 1.25 for NASA's Commercial Crew Program, but I also support ensuring that the Orion, which is our product, comes back online, which is our "space shuttle" that we can work on.

I support \$40 million for the National Space Grant College and Fellowship Program. Science has created such an energy of economic infusion and I enjoy being on the Science Committee because of the opportunities for protecting research and development. But I think with your leadership on these issues, you can know that this—these dollars create an economic engine.

I support \$35 million for the Hispanic-Serving Institutions Undergraduate Program at the National Science Foundation because we need to diversify science and make sure everyone has an opportunity.

And I mentioned economic opportunity, so I support 32 million for Minority Business Development and \$275 million for the Economic Development.

Let me conclude by saying this. The Justice Department is very important to all of us. It is the anchor of justice and the anchor of being the people's lawyer. And so I am just concerned that as you proceed with your review, I know there is an authorizing committee, that we can look to the Justice Department, not to file frivolous lawsuits, and that they hold up what the American people want. And I am a victim of that. I am a victim of that because I am from the State of Texas. And so now there is a lawsuit to completely dismantle the Affordable Care Act using the case in Texas, when Texas has been the largest state—someone said that some other states have been competing with them—the largest state of uninsured individuals.

We can't afford to lose access to healthcare, preexisting condition. And my state is being used to abolish the Affordable Care Act with

no replacement. I don't know who makes decisions. I assume, obviously, the President controls every—but there is a Department of Justice.

So I would just offer to say you have the oversight over this committee and just know that we are suffering. And I don't know how this lawsuit is going to play out. Obviously, my state leaders were involved in it. But it is sad and I would just hope that we would look to do what is for the greater good of the American people.

I thank you very much again for your leadership. And it is a lot of work. And I hope that my comments about supporting certain important elements of the work will play a role because I think it would benefit not only the 18th Congressional District in Texas, but the whole Nation.

[The information follows:]

CONGRESSWOMAN SHEILA JACKSON LEE (TX-18)

**STATEMENT BEFORE THE
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, AND SCIENCE**

**MEMBER DAY HEARING ON
COMMERCE, JUSTICE, SCIENCE, AND RELATED
AGENCIES APPROPRIATIONS ACT FOR FY2020
TUESDAY, MARCH 26, 2019
2:00 P.M.
H-309, THE CAPITOL**

Chairman Serrano, Ranking Member Aderholt and distinguished Members of the Subcommittee:

- As a senior member of the Committees on the Judiciary and on Homeland Security, let me offer my appreciation and thanks to Chairman Serrano and Ranking Member Aderholt for the difficult work and choices that must be made to produce a truly bipartisan CJS spending bill, and for their commitment to the advancement of science and commerce, to the fair administration of justice, and to developing sensible reforms to make our criminal justice system better.
- Mr. Chairman, I understand that my entire statement will be made part of the record so I will keep my remarks brief. In the few minutes allotted I wish to highlight three areas which warrant the Committee's continuing attention and support: (1) criminal justice reform; (2) advancement of scientific knowledge and space exploration; and (3) expanding economic opportunity to women and minority business enterprises so they compete for and win procurement contracts and programs grants.

I. CRIMINAL JUSTICE REFORM

I support \$300 million for Community Oriented Policing Services (COPS) programs

- Robust funding for the COPS Office and programs is needed to provide resources and technical assistance to state and local law enforcement agencies to keep our communities safe *and in rebuilding the necessary trust and confidence* between law enforcement and the communities they swear an oath to serve and protect.

I support \$75 million for the National Instant Background Check Systems (NICS) Improvement Amendments Act of 2007

- This funding is urgently needed so that states have the resources needed to upgrade criminal and mental health records made under the authority of the NICS Improvement Amendments Act of 2007 (PL 110-108).

I support \$450 million for the Byrne Justice Assistance Grant program

- The strength of the Byrne JAG program is in its impact across the criminal justice system, from law enforcement to prosecution and courts, crime prevention and education, corrections and community corrections, drug treatment and enforcement, program planning, evaluation, technology improvement, and crime victim and witness initiatives.

I support \$255 million for the State Criminal Alien Assistance Program

- It is important to recognize the vital role that SCAAP funding plays in compensating local law enforcement for fulfilling what is essentially a federal function. Texas is estimated to spend tens of millions to incarcerate undocumented criminal aliens, yet the state is reimbursed under SCAAP for less than 10 percent of these expenses.

I support \$150 million for the Second Chance Act

- The Second Chance Act is an important federal investment in strategies to increase public safety and reduce recidivism by authorizing funding for the development and coordination of reentry services, such as employment training, substance abuse treatment, and mentoring. The Second Chance Act provides grants to government

agencies, tribes and nonprofit groups and other services that address those at most risk for re-offending.

I support \$500 million for Violence Against Women Act programs.

- VAWA programs, including grants to encourage arrest and to provide transitional housing for victims, work together to ensure that the systemic responses to domestic violence and sexual assault are improved and that all victims, whether they live in urban centers or isolated rural areas, can receive lifesaving services and legal assistance.

I support \$35 million to Prevent the Trafficking of Girls

This funding will support the DOJ Office of Juvenile Justice and Delinquency Prevention in establishing a grant for nonprofits and other nongovernmental entities with a proven track record of administering successful prevention and early intervention programs for girls vulnerable to trafficking, displaying the relevant risk factors, at a local or state-level, to scale up and replicate these such programs at a national level.

I support \$250 million for Juvenile Justice Program Grants

- Federal funding of these important programs is a proven and cost-effective way to prevent crime in local communities, reduce youth incarceration, and foster better outcomes for youth. Additionally, federal investment in juvenile justice is fiscally responsible because prevention and intervention programs keep at-risk youth out of the criminal justice system and saves taxpayer dollars by reducing incarceration rates.

I support \$125 million for the Debbie Smith DNA Backlog Grant Program

- This critical funding will provide federal grants to state and local governments to help eliminate the current backlog of unprocessed DNA samples at crime labs.

Congress demonstrated its continued bipartisan support for the Debbie Smith DNA Backlog Grant Program when it extended the program through FY2019 in the Debbie Smith Reauthorization Act of 2014 (P.L. 113-182).

I support \$500 million for the Legal Services Corporation (LSC)

- Congress established LSC to operate as a private, nonprofit corporation to promote equal access to justice and to provide grants for high-quality civil legal assistance to low-income persons and families. LSC distributes more than 90% of its total funding to 134 independent nonprofit legal aid programs that provide legal assistance to low-income individuals and families in every congressional district.
- Programs that receive LSC grants help the most vulnerable, such as military veterans seeking disability benefits, families facing unlawful evictions or foreclosures, and women seeking protection from abuse.

II. SCIENCE AND SPACE EXPLORATION

I support \$1.25 billion for NASA's Commercial Crew Program (CCP)

- Since the retirement of the Space Shuttle fleet, we have been reliant upon the Russians to launch American astronauts to the International Space Station, and return them safely to Earth. I think it fair to say that there is a bipartisan consensus in the Congress that the interests of the United States should not be dependent upon the goodwill or good graces of Russia, and especially not in the area of space which is critical to America's national security.

I support \$40 million for the National Space Grant College and Fellowship Program

- Space Grant is a competitive, national program that is responsive to regional and national needs and that is administered through state-based consortia in all 50 states, Puerto Rico, and the District of Columbia.

- The Space Grant program has proven to be very effective at fulfilling national STEM goals—91% of students who were significantly supported by Space Grant consortia and graduated in 2010 are now active in STEM jobs with NASA, industry and academia, or are pursuing advanced STEM degrees.

I support \$35 million for the Hispanic-Serving Institutions Undergraduate Program at the National Science Foundation

- The America COMPETES Act, created a Hispanic-Serving Institutions program at the National Science Foundation (NSF). The HSI Program is designed to increase the recruitment, retention and graduation rates of Hispanic students pursuing degrees in science, mathematics, engineering or technology and to increase the quality of STEM education.

III. COMMERCE AND ECONOMIC OPPORTUNITY

I support \$40 million for the Minority Business Development Agency

- The mission of MBDA is to foster the growth and competitiveness of U.S. businesses that are minority-owned. Minority firms currently provide nearly 5.8 million people with steady jobs, but have the potential to create 17.5 million jobs, leading to stronger communities and bolstering America's economy. MBDA's investment in minority-owned firms contributes to our long-term economic progress and stability.

I support \$275 million for the Economic Development Administration

- The Economic Development Administration partners with communities in every state to strengthen local economies and create jobs. EDA programs provide rural and urban communities with critical economic development tools designed to spur business creation and economic growth.

CONCLUSION

- Mr. Chairman, I thank you and the Ranking Member for your leadership and for extending me this opportunity to share some of my priorities with you.

Mr. SERRANO. Well, thank you, Congresswoman Jackson Lee. I suspected when I saw you that you were going to cover a vast area because your advocacy has been that for so many years in Congress where you cover a lot. In fact, I think the only thing you left out was the Congressional pay raise. That is never going to happen, so forget it.

I just want to tell you that so many of the things you mentioned are of great interest to both the ranking member and the chairman. I have a special interest in the census and everyone, in short, because the census really tells us who our country is, who we are, and how we can go forward.

In fact, I would either—having been born in a territory of Puerto Rico, I would even want the territories to be included in the final count. They are not now, so there are American citizens who don't get counted in the population of the United States. And I know the Constitution says count the people amongst the states, but they didn't envision holding a colony for 120 years or so. So there is a lot, but there is so many other things you mentioned are things that we will be talking about.

Thank you for your testimony.

Ms. JACKSON LEE. Thank you so very much.

Mr. ADERHOLT. Thank you for your testimony.

Ms. JACKSON LEE. Thank you. Thank you for the time given. Thank you.

Mr. SERRANO. Mr. Brooks. Congressman Mo Brooks.

THE HONORABLE MO BROOKS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA

Mr. BROOKS. Thank you Subcommittee Chairman Serrano and Ranking Member Aderholt. It is a pleasure to be with you today.

I come to emphasize the importance of the Space Launch System, commonly referred to as SLS, to achieve America's space goals. As a Nation, America must strive to inspire the next generation. The SLS is America's catalyst that inspires our next generation of engineers and explorers. Alabama's Marshall Space Flight Center has played a vital space role for NASA and America. In a way, America's space program was born in Alabama.

By way of one example, we designed and engineered the Apollo 5 rocket that took American astronauts to the moon. Today, we play an integral role in the designing, engineering, and testing of the SLS. NASA and its suppliers great work is turning science fiction into reality.

The SLS helps ensure America's continued dominance in space, a dominance that includes returning astronauts to the moon for long-term exploration and exploration to Mars and beyond.

I support NASA's goals and believe the SLS is integral to achievement of those goals because it is the only vehicle that can generate the thrust and lift necessary to send the Orion spacecraft, astronauts, and a large cargo to the Moon on a single mission.

The SLS will be the most powerful rocket that man has ever created. The lift capabilities of the SLS are unparalleled, with transformative capability. There is no other rocket built or in production with anywhere near the capability of the SLS.

America's long-term space priorities will benefit from staying the course. The SLS will be the most powerful rocket ever built, and the only rocket powerful enough to carry the weight of the Orion spacecraft or the Deep Space Gateway to the moon, both of which are necessary to accomplish America's space policy goals.

It is important that Congress stay the course, support existing law, and provide required funding so that America can once again achieve greatness in space exploration.

America's space program has been and should remain a bipartisan area for Congressional support. I ask that this committee to continue the spirit of bipartisan cooperation in space policy by supporting SLS. Adequate funding for the SLS is critical to achieving our Nation's space policy.

The Appropriations Committee has been consistent over the past several years in providing the funding needed for these programs, and I ask this committee and subcommittee to continue to support full SLS funding in the fiscal year 2020 Commerce, Justice, Science Appropriations bill.

Thank you for the opportunity to be with you today.

[The information follows:]

Congressman Mo Brooks (AL-05):

Chairman José Serrano and Ranking Member Aderholt;

I come before you today to emphasize the importance of the Space Launch System, commonly referred to as the SLS, to achieving our nation's space policy goals.

As a nation, we must strive to inspire the next generation. The SLS will be the catalyst that will inspire the next generation of engineers and explorers to achieve their dreams and do the impossible.

Since the dawning of our space program, the men and women of Alabama have played a vital role for NASA. I am proud of the work that is done at the Marshall Space Flight Center. They play an integral role in the designing, engineering, and testing of the SLS. It is because of the great work by folks at NASA, and its suppliers all around the country, that the next generation has the chance to turn science fiction into reality.

The SLS will ensure American dominance in space and fulfill President Trump space priorities set out when he signed Space Policy Directive No. 1. President Trump has set out an ambitious vision for space in this directive, that includes returning astronauts to the Moon for long-term exploration and exploration to Mars and

beyond.¹ I support the Trump Administration's goals and believe that the SLS will be integral toward accomplishing President Trump's directive because it is the only launch vehicle that can generate the thrust and lift necessary to send the Orion spacecraft, astronauts, and a large cargo to the Moon on a single mission.

The SLS will be the most powerful rocket that man has ever dreamed.² The lift capabilities of the SLS are unparalleled, with transformative capability. There is no other rocket built or in production with anywhere near the capability of the SLS.

America's long-term space priorities will benefit from staying the course. As a matter of policy, the SLS should remain the launch vehicle for the Exploration Missions. The SLS will be the most powerful rocket ever built, and the only rocket powerful enough to carry the weight of the Orion spacecraft or the Deep Space Gateway to the Moon, both of which are necessary to accomplish our nation's space policy goals.

It is important that Congress stay the course, support existing law, and continue to provide enough funding so that our nation can achieve greatness in space exploration once again. Space should

¹ Presidential Memorandum, Reinvigorating America's Human Space Exploration Program (December 11, 2017); <https://www.whitehouse.gov/briefings-statements/president-donald-j-trump-will-make-america-leader-space-exploration/>

² Space.com, (op-ed) *Yes, NASA's New Megarocket Will Be More Powerful Than the Saturn V*, Mike Wall (August 16, 2016); <https://www.space.com/33691-space-launch-system-most-powerful-rocket.html>

remain a bipartisan area for Congressional support. I ask that this Committee to continue the spirit of bipartisanship cooperation in space policy with support for the SLS. Through a reinvigorated space exploration program, America can achieve greatness once again by exploring the unexplored.

Adequate funding for the SLS is critical to achieving our nation's space policy. The Appropriations Committee has been consistent over the past several years in providing the funding needed for these programs and I ask this Committee to continue to support full funding in the FY 2020 Commerce-Justice-Science Appropriations bill.

Mr. SERRANO. Thank you. As I said before, we take very seriously all of these programs that fall under this category, the NASA programs and so on. And this committee has always been very favorable to NASA and to these programs. So we will take that into consideration. And we welcome your thoughts as we have heard them, and we thank you for them.

Mr. BROOKS. Thank you, Mr. Chairman.

Mr. ADERHOLT. I will just say you articulated, I think, the issues very well and I certainly look forward to working with you to help make our space program here in the United States second to none. So thanks for your testimony.

Mr. BROOKS. Thank you, Congressman Aderholt.

Mr. SERRANO. Congresswoman Haaland.

THE HONORABLE DEBRA A. HAALAND, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW MEXICO

Ms. HAALAND. Good afternoon. Thank you for having me.

Chairman Serrano, Ranking Member Aderholt, and members of the subcommittee, thank you for this opportunity to speak about some key priorities for the CJS bill. It is an honor to be here. I appreciate the hard work that all of you do. And Chairman Serrano, I thank you for the years of service to our country.

I am going to first talk about the 2020 census. Many areas of my state of New Mexico are rural. In fact, there is more rural areas than there are urban areas, with little to no broadband access. This makes it a challenge to conduct the census. New Mexico has some of the worst poverty rates in the Nation. In fact, half of our population is Medicaid eligible. So it is essential to our state that we have a successful 2020 census to ensure both proper representation in this body and the proper distribution of federal resources to our communities.

The Census Bureau faces a number of challenges, including the present Administration efforts to add an inflammatory question about citizenship that put the success of the 2020 census in jeopardy. I urge you to fund the Census Bureau at the level needed to get an accurate count, including establishing partnerships with hard to count communities and conducting the necessary outreach. And that would include Indian tribes, not just in New Mexico but across the country.

Next, I would like to talk about gun violence. Every day, 100 Americans die from gun violence and hundreds more are shot or injured. Last month, I joined students at Cleveland High School in Rio Rancho, New Mexico, who were victims of gun violence. They had a shooting at their school. Thankfully, no one was physically harmed in the incident that the students' experienced, but the emotional distress is very real.

Students' greatest worry should be preparing for their next exam, not dodging the next bullet. Guns are the second leading cause of death for American children and teens. Our nation is facing a gun violence epidemic that needs solutions, not just thoughts and prayers.

An important part of this solution is improving the background check process, to ensure that guns do not get in the wrong hands.

I urge the committee to include \$100 million for the National Instant Criminal Background Check System program, NICS.

Next, I would like to address sexual assault. I also urge the committee to support survivors of sexual assault and law enforcement efforts by providing at least \$49 million for the National Sexual Assault Kit Initiative, the level passed by the House in fiscal year 2018. My own state of New Mexico has seen the benefit of these grants; at the end of 2018, the state lab cleared its backlog. But there is still work to be done.

Backlogs persist in many of the other labs across the state, and I imagine in the country. Every rape kit that remains untested represents a missed opportunity to bring closure and healing to a survivor, and compromises our public safety. Sexual assault survivors deserve better, and Congress should support any efforts that bring about more justice.

And with respect to Indian country. Indigenous people face serious problems in our country. The U.S. Commission on Civil Rights' Broken Promises report that just came out a few months ago details the government's breach of the trust responsibility and neglect of federal obligations, causing a lack of funding for fundamental services for Native Americans.

The chronic lack of funding has led to a severe lack of resources for tribal public safety and justice systems, resulting in Native Americans experiencing some of the Nation's highest rates of crime and victimization. The DOJ also reported more than four in five Native women have experienced violence within their lives, more than half enduring sexual violence.

In urban areas, the silent crisis of missing and murdered indigenous women is increasing. To address this crisis in the Native American community, I urge the committee to provide robust funding for victim advocates in state courts, especially for indigenous people experiencing this more than normal, higher rate of sexual assault and domestic violence in urban locations.

Thank you for this opportunity to address you. And if you need any other information, we would be happy to.

[The information follows:]

**Testimony of Rep. Deb Haaland (NM-1) for
Commerce, Justice, and Science Appropriations Subcommittee Member Day**

Chairman Serrano, Ranking Member Aderholt, and Members of the Subcommittee, thank you for this opportunity to speak about some key priorities for the CJS bill. It is an honor to be here, and I appreciate the hard work you do.

2020 Census

Many areas of New Mexico are quite rural, with little to no broadband access. This makes it challenging to conduct the Census. New Mexico has some of the worst poverty rates in the nation, so it's essential to our state that we have a successful 2020 Census to ensure **both proper representation in this body and the proper distribution of federal resources to our communities.**

The Census Bureau faces a number of challenges, including the Trump administration's efforts to add an inflammatory question about citizenship, that put the success of the 2020 Census in jeopardy. I urge you to fund the Census Bureau at the level needed to get an accurate count, including establishing partnerships with hard to count communities and conducting the necessary outreach.

Gun Violence

Every day, 100 Americans die from gun violence and hundreds more are shot or injured. Last month, I joined students at Cleveland High School in New Mexico that were victims of gun violence. Thankfully, no one was physically harmed, but the emotional distress is very real. Students' greatest worry should be preparing for their next exam, not dodging the next bullet. Guns are the second leading cause of death for American children and teens. **Our nation is facing a gun violence epidemic that needs solutions, not mere thoughts and prayers.**

An important part of the solution is improving the background check process, to ensure that guns do not get into the wrong hands. I urge the committee to include \$100 million for the National Instant Criminal Background Check System (NICS) program.

Sexual Assault

I also urge the committee to support survivors of sexual assault and law enforcement efforts by providing at least \$49 million for the National Sexual Assault Kit Initiative, the level passed by the House in FY2018. My own state of New Mexico has seen the benefit of these grants; at the end of 2018 the state lab cleared its backlog. But there is still work to be done. Backlogs persist in many of the other labs across the state. Every rape kit that remains untested represents a missed opportunity to bring closure and healing to a survivor, and compromises public safety. Sexual assault survivors deserve better, and Congress should support any efforts that bring about more justice.

Indian Country Funding

Indigenous people face serious problems in our country. The US Commission on Civil Rights' *Broken Promises* report details the government's breach of the trust responsibility and neglect of federal obligations causing a lack of funding for fundamental services for Native Americans.

The chronic lack of funding has led to a severe lack of resources for tribal public safety and justice systems, resulting in Native Americans experiencing some of the nation's highest rates of crime and victimization. The DOJ also reported more than 4 in 5 Native women have experienced violence within their lives; with more than half enduring sexual violence. In urban areas, the silent crisis of **Missing and Murdered Indigenous Women** is increasing.

To address this crisis in the Native American community, I urge the committee to provide funding for victim advocates in state courts, especially for indigenous people experiencing sexual assault and domestic violence in urban locations.

Thank you for the opportunity to be heard and look forward to a CJS bill that addresses the needs of all Americans.

Mr. SERRANO. Well, we thank you for your testimony today. The issues you bring up are very important issues that this committee will be looking at from the census to sexual assault, sexual violence. And all of them are issues that are very, very important. And it is good to have members that can give us first hand information on many issues. So we thank you for your testimony.

Ms. HAALAND. Thank you, Chairman.

Mr. SERRANO. Mr. Aderholt?

Mr. ADERHOLT. Thank you for your testimony. We look forward to working with you. And thanks so much for being here today.

Ms. HAALAND. Thank you very much.

Mr. SERRANO. And now we have is our next witness, Chairman Visclosky. I am not going to make that mistake of calling you anything else.

**THE HONORABLE PETER J. VISCLOSKY, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF INDIANA**

Mr. VISCLOSKY. Mr. Chairman, thank you very much and I look forward to continuing to sit with you on full committee for next year.

Mr. SERRANO. You are welcome, Mr. Chairman.

Mr. VISCLOSKY. You have my full statement for the record.

Mr. SERRANO. Yes.

Mr. VISCLOSKY. I would like to summarize it. I am here on behalf of two priorities. The first is the funding for the International Trade Commission and secondly, appropriate funding for the implementation of the Civil Rights Cold Case Records Collection Act of 2018.

The ITC, the International Trade Commission, does very important work as far as enforcing our laws to protect American workers against illegally traded goods and services. The Office of Management and Budget just submitted a request for \$91.1 million under the law. The ITC submits an independent budget estimate, and their request is for \$101 million. And that is the request I am here to support.

In fiscal year 2020, the ITC will need additional resources to conduct analysis required by the American Manufacturing Competitiveness Act of 2016. This law requires the ITC to collect petitions to suspend or reduce certain tariffs in the forthcoming miscellaneous tariff bill.

Further, section 232 and three stages of section 301 tariffs have required the ITC to revise their harmonized tariff schedule of the United States 13 times this past year, as compared to 3 times in a typical year. And finally, the ITC does need to update and modernize their information and technology infrastructure, and manage an increasing and complex case load.

Secondly, I am here to testify on behalf of the funding to fully implement the Civil Rights Cold Case Records Collection Act of 2018. I understand there are negotiations going on between your subcommittee, as well as the subcommittee on financial services and government general as to the appropriate venue to fund this effort.

I do understand that thoughtful consideration will take place and a resolution will happen. I think for too long, families of lynching and other hate crime victims have gone without information regarding crimes against their ancestors. I remain deeply cognizant of the legacy of racial inequality that continues to be present today in the United States. And I believe that we should do everything in our power to confront and address the suffering caused by racial terror and violence.

And with that, I do thank you for your time today.

[The information follows:]

**Remarks for the Commerce, Justice, Science, and Related Agencies Appropriations
Subcommittee Member Day**

Congressman Peter J. Visclosky

March 26, 2019

I would like to thank Chairman Serrano, Ranking Member Aderholt, and all the members of the Commerce, Justice, Science, and Related Agencies Appropriations Subcommittee for holding today's hearing and working hard to ensure that American taxpayer dollars are effectively and efficiently invested in our nation's human capital and economic infrastructure.

It remains my top priority to ensure that American workers and their jobs are protected from illicit trading practices of foreign countries. The U.S. International Trade Commission or ITC is vital to this end. In their budget justification released independently as mandated by U.S. law, the ITC requested \$101 million for carrying out their critical functions. I would note that Office of Management and Budget made their own request for the ITC of \$91.1 million, far below the ITC's request. I urge the Subcommittee to use the ITC's independent budget justification and fund the ITC at \$101 million for Fiscal Year 2020.

I frequently testify at ITC hearings in support of enacting trade remedies to ensure our domestic producers can compete on a level playing field with foreign producers. Pervasive dumping and subsidizing by our foreign competitors are violations of U.S. trade law and continue to leave our domestic industry struggling to compete. The ITC ensures that each case arguing material injury is expertly investigated and judiciously determined.

I would like to highlight a few specific tasks that I believe justify the request. In Fiscal Year 2020, the ITC will need additional resources to conduct analysis required by the American

Manufacturing Competitiveness Act of 2016. This law requires that the ITC collect petitions to suspend or reduce certain tariffs in the forthcoming Miscellaneous Tariff Bill. The ITC then recommends to House and Senate Committees which petitions be included in the final bill text. With this process beginning in October 2019, additional funding is needed to ensure the process moves through completion.

Further, the recent Section 232 and three stages of Section 301 tariffs have required that the ITC revise the Harmonized Tariff Schedule, or HTS, of the United States 13 times this year, as compared to 3 times in a typical year. As the ITC is statutorily required to maintain the HTS database, as well as serve as a conduit to convey any revisions to private companies for implementation and the U.S. Customs and Border Protection for enforcement, the ITC needs additional funds.

Finally, the ITC needs to update and modernize their information technology infrastructure, hire additional personnel, and manage increasingly high unfair trade caseloads. I urge the Subcommittee to ensure the ITC is fully funded at \$101 million for Fiscal Year 2020, so that it can perform its investigative work, as well as judiciously and expeditiously resolve cases.

Second, I testify here today in support of the implementation of the Civil Rights Cold Case Records Collection Act of 2018. Passed into law in December 2018, this law requires that the National Archives and Records Administration collect, prepare, and publish civil rights cold case records kept at the Department of Justice for public disclosure, as well as establish an independent review board of private citizens to review the files.

As I understand it today, there remains a question about which Appropriations Subcommittee, whether this Subcommittee or Financial Services and General Government, will be responsible

for this new funding, but I urge a thoughtful resolution to ensure this law is fully funded in Fiscal Year 2020.

The impetus of this law was a New Jersey high school class, who researched this issue, drafted legislation, and lobbied Capitol Hill to usher the legislation through to enactment into law. I was inspired by these young people, and as a public servant, I am continually reminded of the responsibilities that have been entrusted to each of us to ensure people everywhere receive justice.

For too long, families of lynching and other hate crime victims have gone without information regarding crimes against their ancestors. I remain deeply cognizant of the legacy of racial inequality that continues to be present today in the United States, and I believe that we should do everything in our power to confront and address the suffering caused by racial terror and violence.

In an extensive report, the nonprofit Equal Justice Initiative found evidence of over 4,400 racially-motivated lynchings between 1877 and 1950. However, racially-motivated lynching continued to occur throughout the 1960s, and the last recorded lynching in the United States happened in 1981 in Mobile, Alabama.

While states had jurisdiction to prosecute these acts of murder, many perpetrators of this despicable violence did not face justice because states refused to act, tacitly encouraging further racism and violence. The failure to address lynching is one of the most shameful chapters in the history of the United States. Addressing our past is essential to bringing justice to victims and their families and preventing future racially-motivated crimes.

I thank the Subcommittee for allowing me to testify today, and I urge the Subcommittee to make it my priority to ensure the ITC and the Civil Rights Cold Case Records Collection Act are properly funded in Fiscal Year 2020.

Mr. SERRANO. Well, we thank you and you know how the system works. And we add to that that we take very seriously your concerns, and we will take it and keep it in mind as we move along. Mr. Aderholt?

Mr. ADERHOLT. I would just say thank you. Of course, you are not stranger to this subcommittee. So good to have you back today with us. So thanks for your testimony. There is a lot today.

Mr. SERRANO. Thank you, sir. Thank you. The meeting is adjourned.

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